

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1222.—VOL. XXIX.

London, Saturday, January 22, 1859.

STAMPED.....SIXPENCE.
UNSTAMPED..FIVEPENCE.

M R. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL (established 15 years), having resolved to extend his business, begs to intimate that he BUYS and SELLS every description of BRITISH and FOREIGN STOCKS and SHARES, RAILWAYS, DOCKS, CANALS, and other securities, particularly BRITISH MINING SHARES, in which dividends are paid ranging 15 to 80 per cent. per annum, with perfect freedom from any kind of risk; whilst speculative (or progressive) shares frequently yield large and immediate profits, if well bought. Advice given to capitalists by letter, or personally.

Mr. Crofts refers the readers of the Journal to his weekly review of the market, on page 65. The present moment presents peculiar opportunities for investments on a large scale.

Office hours, Ten to Five.

No. 1, Finch-lane, Cornhill, London, E.C.

M R. JAMES LANE, NO. 29, THREADNEEDLE STREET,
MINING SHARE DEALER.

JAMES B. BRENCLEY, of 19, TOKENHOUSE YARD,
LONDON, is a BUYER or SELLER in DIVIDEND and PROGRESSIVE
MINES, for CASH. Bankers: London and Westminster.

M R. LELEAN, 4, CUSHION COURT, OLD BROAD STREET,
will RESUME his WEEKLY LIST of PRICES NEXT WEEK, as his health
is entirely restored.

DIVIDEND MINES, well selected, are the BEST of all PUBLIC INVESTMENTS, paying, as they do (in dividends every two or three months), from 20 to 30 per cent. per annum. NON-DIVIDEND MINES, carefully chosen, frequently advance in price 600 per cent., or more.

PETER WATSON, having 14 years' experience in every department of mining and its management, together with an extensive and regular correspondence with mining agents and others in Cornwall, Devon, and elsewhere, is enabled to judge of and select mines of intrinsic value.

A SPECIAL REPORT (WEEKLY) WILL APPEAR IN PETER WATSON'S "MINING CIRCULAR," by his own Agents. ABRIDGED notices will also be given, and important information on the present and future operations of mines throughout Cornwall and Devon, with advice thereon as to purchase or sale of shares.

Those who desire to have copies regularly sent them will be supplied for an annual subscription of £1 1s., or 6d. per copy.

PETER WATSON,
English and Foreign Stock, Share, and Mining Offices,
3, Old Broad-street, London, E.C.

M R. JOHN ANTHONY, MINING ENGINEER.
ESTIMATES AND SPECIFICATIONS FOR ALL KINDS OF MACHINERY PREPARED.

11, ARUNDEL CRESCENT, PLYMOUTH.

NOTICE.—MINING OFFICES, CORN EXCHANGE, LEEDS.

J OHN GLEDHILL AND CO.'S MINING OFFICES are REMOVED from 12, South Parade, to the CORN EXCHANGE. They beg to inform those who have money to invest that they have SEVERAL VALUABLE LEAD and COPPER MINING SETTS on hand, which they have personally inspected, and can fully recommend. Some of these sets are situate in Yorkshire, Cumberland, Northumberland, and Scotland. Arrangements can be made to work them either by private enterprise or as public companies, under the Joint-Stock Companies Act (Limited), 1856. J. GLEDHILL and Co. will be glad to afford full information to bona fide parties respecting any of the above sets, and to assist in forming and establishing companies to work them, if after investigation it is thought desirable. They have also SHARES FOR SALE in many of the PROGRESSIVE and DIVIDEND MINES.

M R. JOHN RISLEY, MINE SHAREBROKER,
JAMAICA, COFFEE HOUSE, ST. MICHAEL'S ALLEY, •
CORNHILL, LONDON.

Mr. J. RISLEY will be happy to furnish, on application, a List of Dividend and Progressive Mines worthy of especial attention, two or three of the latter that may possibly rise 100 per cent. in market value within a few months. The present very cheering prospectus of the two mines specially advocated the last nine months must be very pleasing to the shareholders—viz., East Bassett and Pendene Consols.

P.S.—References required with buying or selling orders.

M ONEY MARKET.—BRITISH and FOREIGN FUNDS, BANKS, INSURANCE, MINING and RAILWAY SHAREHOLDERS, are respectfully informed that EVERY DESCRIPTION of STOCK and SHARES continue to be BOUGHT and SOLD, either for cash or on the account, at the market price of the day, through the medium of the Stock Exchange, by Messrs. FULLER AND CO., No. 51, THREADNEEDLE STREET, LONDON, who have enlarged their premises, thereby affording every facility for giving the hourly current price of stocks, &c. Country communications have prompt attention, and every information given to parties seeking investments. British mining shares range from 12½ to 20 per cent. Others of a progressive character, frequently advance in price from 50 to 100 per cent. upon the outlay. The present period offers to capitalists an opportunity which cannot fail to remunerate all who invest.

Office hours, from Ten till Five o'clock daily.

Bankers: Sir J. W. Lubbock, Bart., Foster, and Co.

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES.

Dividends payable two-monthly or quarterly.

M R. R. TREDDINICK, MINING ENGINEER, SENDS his ELECTED LIST of SOUND PROGRESSIVE AND DIVIDEND SHARES upon a fee of a few of One Guinea.

Replies: Cornish and Devon Mining Enterprise, 5s. per copy.

Maps per post of the Butler and Bassett, Great West, Alfred Consols, the Providence and Margaret, South Caron, and the Devon Great Consols Districts, 2s. 6d. each.

Cornish Mines, well selected, pay better than any other description of securities, are free from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.

Money advanced at 10 per cent. annually, or short or long periods, upon approved Mining Shares.—4, Austinfriars, Old Broad-street, London, E.C.

M R. M. S. RICHARDS, BRITISH AND FOREIGN STOCK, RAILWAY, AND MINING SHAREBROKER, No. 27, AUSTINFRIARS, LONDON, E.C., has the undermentioned MINING SHARES FOR DISPOSAL, or any part thereof, on Tuesday morning next, at the PRICES QUOTED:

1. S. Wh. Francis, £237½. 20 E. Providence, 10s. 9d. 25 Sortridge Cons., 15s. 6d. 10 Calstock Cons., £4½. 20 North Trelawny. 25 Great Hawas, 11s. 20 Kelly Bray, £2¾. 25 Wheal Arthur, 12s. 20 Wheal Wrey, £2½. 25 Wheal Sidney. 10 East Russell. 20 Tavy Consols, 15s. 1 Old Tolquis. 10 Tolcarne. 20 Wheal Addams, 21s. 20 No. Robert, £2 15s. 6d. 20 Trewetha, 16s. 6d.

In introducing himself to the holders of stock of the above description, Mr. Richards, begs most respectfully to solicit a share of public patronage, and for so doing, promises to be 1½ per cent. on all stock bought and sold up to 100% in value; above that sum 1%, per share only will be charged.

Mr. Richards undertakes to furnish full particulars of all business done, and guarantees to render a faithful account, and at net prices. In order the more effectually to assist his clients in their selection of stock, which will be from time to time advertised for sale, he intends establishing a rule not to dispose of any advertised stock until after Tuesday morning's post, and should there be more than one claimant for any particular lot it will be offered pro rata, to each party desirous of purchasing.

Mr. Richards also begs to remind his friends that he has secured the services of a thoroughly practical mining agent (20 years' experience) to report for him on such mines as his clients may be disposed to invest in, for which a mere nominal sum will be charged.

All letters or communications addressed to Mr. M. S. RICHARDS, 27, Austinfriars, London, will receive immediate attention.—Dated, Jan. 21, 1859.

M R. REGINALD HORLEY, SWORN STOCK AND SHAREBROKER, 48, THREADNEEDLE STREET, E.C., TRANSACTS BUSINESS IN MINING SHARES on commission. The present high price of metals will greatly increase the amount of dividends in the best class of mining shares. Amongst those desirable for investment are the following:—South Caron, West Caron, East Bassett, Wheal Bassett, South Frances, West Wheal Seton, Carn Bras, Par Consols, United Mines, Wheal Charlotte, Great South Tolquis, Providence, Roseann, Wheal Margaret, Wheal Kitty (Lelant), Wheal Kitty (St. Agnes), Wheal Trelawny, Wheal Mary Ann, North Dolcoath, Kelly Bray, St. Ives Consols, Rosewarne, United, St. Day United, Wheal Uny. During the past week those referred to in our last have in most instances risen from £10 to £15 per share.—48, Threadneedle-street, London, E.C.

G REAT WHEAL BUSY MINE.—M R. BUDGE, of 4, ROYAL EXCHANGE BUILDINGS, LONDON, is a BUYER of 200 shares, or any less number, at £5 per share, cash on presentation of transfer.

Mr. BUDGE is a SELLER of 20 North Downs, £3 13s. 6d.; 1 United Mines, £136; 10 Trevose, £164; 100 St. Day United, 17s. 6d.; 80 Great Barrier, 28s.; 20 Wheal Kitty (St. Agnes), £4½; 20 Hington Down, £3 15s.; 100 Wheal Harriet, 15s. 9d.; 10 Bedford United, £9½; 50 Tamar Consols, 29s. 6d.; 50 Lady Bertha, 22s. 6d.; 2 Mary Ann; 20 North Frances; 2 Margaret; 2 Rosewarne, £41.

G E O R G E M O O R E,
1, CROWN COURT, THREADNEEDLE STREET.

GEORGE MOORE will SELL the following SHARES, or any part, to-day, at quoted prices, FREE OF ANY COMMISSION:

DIVIDEND.

1 Carn Bras, £70. 1 North Roskar, £21½. 50 Sortridge.

1 Condurrow. 1 Providence. 1 West Seton, £35.

1 Grambler, £21½. 1 Rosewarne United.

NON-DIVIDEND.

50 Camborne Vean, 7s. 9d. 50 E. Rosewarne, 15s. 9d. 55 Lady Bertha, 20s. 9d.

1 East Bassett. 50 East Russell. 5 North Minera.

25 E. Gunnis Lake, £1½. 10 Great Alfred. 50 Wheal Addams, 19s. 9d.

GEORGE MOORE will sell shares for time, at a slight advance in price, to any one possessing a name of commercial value.

GEORGE MOORE will PURCHASE or SELL any shares on commission, when specially requested to do so, for the following charges:

For shares under £1 each 0 0 6 per share.

Above £1 and under £2 0 1 0

Above £2 and under £5 0 1 6

Above £5 2 10 0 per cent.

PURCHASERS of undoubted respectability can register transfers and receive CERTIFICATES of same previous to PAYMENT.

In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

For further particulars, apply to the Auctioneer, at his office, 2, Crown-court, Threadneedle-street, London.

VALUABLE FORFEITED AND OTHER SHARES FOR SALE.

M R. T. P. THOMAS WILL SELL, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, January 27, 1859, at One o'clock precisely, the following valuable MINING SHARES:

9 (256th) parts, or shares, in Egglebrook Lead Mine, Llanbadarn-fair, near Aberystwyth, with Cardiganshire, forfeited for non-payment of calls.

200 (5120th) Wheal Harriet Copper and Tin Mine, forfeited for non-payment of calls.

23 (1055th) shares in Carvallo Copper Mine, Cornhill.

3 (512th) Rosewarne United shares.

20 (4096th) East Alfred Consols.

40 (4096th) East Russell.

50 (5120th) Great Wheal Alfred.

5 (567th) Cwm Erdins, paying dividends.

100 (4096th) Devon Burna Burra.

75 (1024th) Great Sheba.

125 (17500th) Great Tregunnah Consols.

60 P. Phillip Gold Mine.

5 (26560th) Great Wheal Vor.

15 (6140th) Wheal Arthur.

20 (5000th) Willow Bank.

20 (6000th) Cwm Sebon.

For further particulars, apply to the Auctioneer, at his office, 2, Crown-court, Threadneedle-street, London.

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FOR SALE, THE VIRTUOUS LADY AND WHEAL BEDFORD COPPER MINES.

M R. T. P. THOMAS has been favoured with instructions to SELL, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 27th day of January inst., at One o'clock, the above valuable MINES, situate in the parishes of Buckland Monachorum, and Tavistock, in the county of Devon, together with the BUILDINGS, MACHINERY, MATERIALS, &c., forming the plant of the adventurers in and upon the mines, comprising, amongst other things, two numerous to mention, TWO WATER-WHEELS, one 24 ft. diameter 9 ft. 6 in. breast, and one 34 ft. diameter 2 ft. 9 in. breast; one CRUSHING MILL, one DRAWING MACHINE, 30 fms. of 7 in. pumps, and 200 fms. of chain, &c.

These mines are situate in a rich mineral district, and it is considered by practical miners that a small outlay will put them into a profitable position.

For further particulars and conditions, apply to Mr. T. P. Thomas, at his office, 2, Crown-court, Threadneedle-street, London.

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FOR SALE, THE BULLER AND BERTHA COPPER MINES.

M R. T. P. THOMAS has been favoured with instructions to SELL, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 27th day of January inst., at One o'clock, the above valuable MINES, situate in the parishes of Buckland Monachorum, and Tavistock, in the county of Devon, together with the BUILDINGS, MATERIALS, MACHINERY, &c., forming the property of the adventurers in and upon the mines, comprising, amongst other things, two numerous to mention, one 14 in. STEAM ENGINE, &c.

These mines are adjoining the Virtuous Lady and Wheal Bedford Copper Mines, and are well worthy the attention of capitalists.

For further information, application to be made to Mr. NICHOLSON, 57, Old Broad-street, or to the Auctioneer, at his office, 2, Crown-court, Threadneedle-street, London.

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M R. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHARE DEALER, 11, DALE STREET, LIVERPOOL.

J OHN R OBERT P IKE,
MINING AND GENERAL SHARE DEALER,
3, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

NOW Ready,

IS MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE CHANNEL FOR INVESTMENT? OR IS IT NOT? FACTS AND FIGURES

May be had gratis on application, either personally or by letter.

M R. R. LINTHORNE, ENGLISH AND FOREIGN MINING AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.

N.B. Business transacted in every description of stock and shares.

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WEST END MINE AND QUARRY OFFICES, 10, REGENT STREET, S.W., PALL MALL.

M ESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL SURVEYORS, undertake the MANAGEMENT AND WORKING OF MINES, QUARRIES, &c., and CONDUCT THE LONDON AGENCY of all MINERAL PROPERTIES in their offices with system, economy, and regularity.

Messrs. Brunton and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:—

Accounts systematically and closely made up.

Statements in detail, and clear summaries of finance and expenditure.

BRICKS.—Messrs. OATES AND INGRAM inform brick makers on an extensive scale that their PATENT SOLID BRICK MACHINE is now THOROUGHLY and EFFICIENTLY TESTED, and are prepared to OFFER the following counties to the trade, in districts, either by ROYALTY or PURCHASE:—Middlesex, Surrey, Sussex, Essex, Kent, Norfolk, Suffolk, Cambridge, Oxford, Gloucester, Hereford, Berks, Bucks, Huntingdon, Devon, Cornwall, Dorset, Wilts, Hants, and Isle of Wight.

With this PATENT MACHINE the ordinary surface clay requires no preparation whatever, whilst that of a rocky nature has merely to be passed through rollers in the usual way, and THENCE, WITHOUT ANY TEMPERING, INTO THE MACHINE, FROM WHICH THE BRICKS ARE REMOVED DIRECT TO THE KILN IN A STATE READY FOR BURNING.

The MACHINE is now making UPWARDS OF THREE HUNDRED BRICKS PER MINUTE at the works of Messrs. Kirk and PARRY, Government contractors, Fort Elson, near Birmingham.

Application for orders to see the machine in operation to be made to Messrs. OATES and INGRAM, Bradford-street, Birmingham. Samples of clay may be sent and passed through the machine, and the bricks burnt, or a sample brick will be sent to any party wishing to see one.

ASSAY OFFICE AND LABORATORIES, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON.

Conducted by MITCHELL and RICKARD (late John Mitchell, F.C.S., Author of *Manual of Practical Assaying*, Metallurgical Papers, &c.)

Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.

For amount of fees, apply to the office, as above.

THEODOLITES, LEVELS, CIRCUMFERENTERS, MATHEMATICAL DRAWING INSTRUMENTS, SCALES, RULES, TAPES, &c.—JOHN ARCHIBALD, 20, WESTMINSTER BRIDGE ROAD, LAMBETH, near Astley's Theatre, respectfully calls attention to his stock of the above articles, manufactured by superior workmen. The prices will be found considerably lower than ever charged for articles of similar quality. An illustrated price list forwarded free on application: 8 in. dummy level, complete, six guineas; 10 in. ditto, eight guineas; 14 in. ditto, ten guineas; with compass, one guinea each extra; best 5 in. theodolite, divided on silver, eighteen guineas.

MAPPIN'S ELECTRO-SILVER PLATE & TABLE CUTLERY.

—MAPPIN BROTHERS (Manufacturers by Special Appointment to the Queen) are the only Sheffield makers who supply the consumer in London. Their London Show Rooms, 67 and 68, KING WILLIAM STREET, LONDON BRIDGE, contain by far the LARGEST STOCK OF ELECTRO-SILVER PLATE and TABLE CUTLERY in the world, which is transmitted direct from their manufactory, QUEEN'S CUTLERY WORKS, SHEFFIELD.

Fiddle Pat. Double Thread. King's Pat. Lily Pat.
12 Table Forks, best quality £16 0 .. £2 14 0 .. £3 0 .. £12 0
12 Table Spoons, best quality 1 16 0 .. 2 14 0 .. 3 0 .. 3 12 0
12 Dessert Forks, best quality 1 7 0 .. 2 0 0 .. 2 4 0 .. 2 14 0
12 Dessert Spoons, best quality 1 7 0 .. 2 0 0 .. 2 4 0 .. 2 14 0
12 Tea Spoons, best quality 1 6 0 .. 1 4 0 .. 1 7 0 .. 1 16 0
2 Sauce Ladies, best quality 0 8 0 .. 1 0 0 .. 6 11 0 .. 0 13 0
1 Gravy Spoon, best quality 0 7 0 .. 1 0 0 .. 6 11 0 .. 0 13 0
4 Salt Spoons (gilt bowls), best qu. 0 6 8 .. 1 0 0 .. 6 12 0 .. 0 14 0
1 Mustard Spoon, best quality 0 1 8 .. 0 2 6 .. 0 3 0 .. 0 3 6
1 Pair Sugar Tongs, best quality 0 3 6 .. 0 5 6 .. 0 6 0 .. 0 7 0
1 Pair Fish Carvers, best quality 1 0 0 .. 1 10 0 .. 1 14 0 .. 1 18 0
1 Butter Knife, best quality 0 3 0 .. 0 5 0 .. 0 6 0 .. 0 7 0
1 Soup Ladle, best quality 0 12 0 .. 0 16 0 .. 0 17 6 .. 1 0 0
6 Egg Spoons (gilt), best quality 0 10 0 .. 0 15 0 .. 0 18 0 .. 1 1 0

Complete Service £10 13 10 .. £15 16 6 .. £17 13 6 .. £21 4 6

Any article can be had separately at the same price.

One Set of Four Corner Dishes (forming eight dishes), £3 8s. One Set of Four Dish Covers (one 20 in., one 18 in., and two 14 in.), £10 10s. Crucifix (four glass), 24s.; Full Size Tea and Coffee Service, £9 10s. A Costly Book of Drawings, with prices attached, sent post on receipt of 12 stamps.

Orn. qual. Medium qual. Best qual.

Two dozen Full Size Table Knives, Ivory Handles £2 4 0 .. £2 6 0 .. £2 12 0

1/2 dozen Full Size Cheese ditto 1 4 0 .. 1 14 0 .. 2 11 0

One Pair Regular Meat Carvers 0 7 6 .. 0 11 0 .. 0 15 6

One Pair Extra Small ditto 0 8 6 .. 0 12 0 .. 0 16 6

One Pair Poultry Carvers 0 7 6 .. 0 11 0 .. 0 15 6

One Steel for Sharpening 0 9 3 0 .. 0 9 4 0 .. 0 6 0

Complete Service £4 16 0 .. £6 18 6 .. £9 16 6

Messrs. MAPPIN's table knives still maintain their unrivaled superiority; all their blades, being their own Sheffield manufacture, are of the very first quality, with secure ivory handles, which do not come loose in hot water, and the difference in price is occasioned solely by the superior quality and thickness of the ivory handles.

—MAPPIN BROTHERS, 67 and 68, King William-street, City, London. Manufactory, Queen's Cutlery Works, Sheffield.

Published on January 1, price 6d. per copy, or 6s. annually.—No. III of THE MINING REVIEW, AND MONTHLY COMMERCIAL RECORD.

The chief object of this publication will be to furnish shareholders, capitalists, and the public with reliable information relating to Mining, Railway, and other Commercial Securities, together with statistics and general observations of utility to investors. No. 2 will contain:—

List of Dividends Paid by Cornish and Devon Mines during the past 12 years.

Weekly Review of Business Transacted in Cornwall during the month.

Daily Report of the Share Transactions in the best Dividend and Progressive Mines.

Leading Articles on Cornish and Devon Mining Enterprise and the Cost-book System.

Compendium, giving a detailed description of the Bassett, South Frances, Old Tolpuddle United, South Buller and West Penrith, Buller and Bassett United, West Grenville United, and North Downs Mines.

Monthly Commercial Record.

Prices of Railway Stock.

Sales of Copper and other ores, with a mass of valuable data and useful information.

Published at the offices, 4, Austin Friars, London, and to be had of all newsmen.

INVESTMENTS IN BRITISH MINES.

Full particulars of the most important Dividend and Progressive Mines will be found in the Fourth Edition of

BRITISH MINES CONSIDERED AS AN INVESTMENT.

Recently published, by J. H. MURCHISON, F.G.S., F.R.S.

Pp. 356; price 3s. 6d., by post, 4s.

Mr. MURCHISON also publishes a QUARTERLY REVIEW OF BRITISH MINING, giving, at the same time, the Position and Prospects of the Mines at the end of each quarter, the Dividends Paid, &c.; price 1s. Reliable information and advice will at any time be given by Mr. MURCHISON, either personally or by letter, at his offices, No. 117, Bishopsgate-street Within, London, where copies of the above publications can be obtained.

OPINIONS OF THE PRESS.

Mr. MURCHISON's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal*.

The book will be found extremely valuable.—*Observer*.

A valuable little book.—*Globe*.

A valuable guide to Investors.—*Heraclitus*.

Mr. MURCHISON takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald*.

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle*.

Parties requiring information on mining investments will find no better and safer instructor than Mr. MURCHISON.—*Derby Telegraph*.

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph*.

To those who wish to invest capital in British Mines, this work is of the first importance.—*Welschman*.

This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—*Plymouth Journal*.

Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser*.

It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—*Sheffield Free Press*.

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—*Montgomery Beacon*.

Every person connected, or who thinks of connecting himself, with mining speculators, should possess himself of this book.—*North Wales Chronicle*.

A very valuable book.—*Cornwall Gazette*.

All who have invested, or intend to invest, in mines should peruse this able work.

We believe a more useful publication, or one more to be depended on, cannot be found.

—*Plymouth Herald*.

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald*.

Mr. MURCHISON will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express*.

Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner*.

All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Spanish Express*.

Of great value to capitalists.—*Sunderland Times*.

To capitalists the work will prove very serviceable.—*Birmingham Mercury*.

This is really a practical work for the capitalist.—*Stockport Advertiser*.

NOTICE TO RAILWAY AND STEAM-BOAT TRAVELLERS, —ANDERTON'S HOTEL, 162, 164, 165, FLEET STREET, BREAKFAST, with joint, 1s. 6d. BEDS, 10s. 6d. per week. DINNERS from Twelve to eight o'clock; joint and vegetable, 1s. 6d.; with soup or fish, 2s. TURTLE SOUP AND VENISON DAILY. TABLE D'HOËTE from Half-past one and Half-past five, at Two Shillings. A night porter in attendance.

W I N E S F R O M S O U T H A F R I C A .—DENMAN, INTRODUCER of the SOUTH AFRICAN PORT, SHERRY, &c., 20s. per dozen, bottles incased. A pint sample of each for 2s. stamps. Wine in cask forwarded free to any railway station in England.

(Extract from the *Lancet*, July 10, 1858.)

THE WINES OF SOUTH AFRICA.—We have visited Mr. Denman's stores, selected in all eleven samples of wine, and have subjected them to careful analysis. Our examination has extended to an estimation of their bouquet and flavour, the acidity and sweetness, the amount of wine stone, the strength in alcohol, and particularly to their purity. We have to state, that these wines, though branded to a much less extent than Sherries, are yet, on the average, nearly as strong; that they are pure, wholesome, and perfectly free from adulteration; indeed, considering the low price at which they are sold, their quality is remarkable.

EXCELSIOR BRANDY, Pale or Brown, 15s. per gallon, or 30s. per dozen.

Treacle. Country order must contain a remittance. Crossed cheques, Bank of London. Price lists, with Dr. Hassall's analysis, forwarded on application.

JAMES L. DENMAN, 65, Fenchurch-street, corner of Railway-place, London.

OUTLINES OF PRACTICAL SCIENCE, ESPECIALLY OF GEOLOGY AND MINERALOGY APPLIED TO MINING, CIVIL ENGINEERING, ARCHITECTURE, &c.

No. III.—SUMMARY OF GENERAL GEOLOGY.—(Continued.)

We think that the best course we can adopt is to present to our readers a complete table of the fossiliferous rocks representing the present views of geologists (derived chiefly from Ansted's *Geology*), and having the characteristic foreign equivalents side by side, so that by occasional reference to this table the reader may ascertain in what position and order the rock occurs of which we may be speaking. If a foreign equivalent, its British prototype can at once be found. In some instances the foreign rock may not be in this table, as when its British equivalent is unknown, or when it is too local for a general table, like the present. In other instances the foreign equivalents are too numerous and ambiguous for tabular exhibition. This is the case, for example, with the Upper Silurian and the Lower

Silurian series, which are very extended formations in some foreign countries. In the State of New York ten stages are found of the Upper Silurian rocks, from the Oneida conglomerate, Medina sandstone, and Clinton groups, up to the tenth bed—the Upper Pentamerus limestone, so named from containing the shell pentamerus, a characteristic fossil of our own similar limestone. With reference to the Lower Silurian series, a vast deposit of it, consisting of eight stages, occurs in North America. Of these stages the first is the Potsdam sandstone, the second the Calciferous sandstone, and the eighth the Hudson River group.

So much of the older terminology is preserved in this table as to render it generally intelligible, while the names of systems and groups are simple and plain. Where some recent technical terms are adopted they are mostly explained, and the mere zoological divisions of the formations have been only employed when essential. The term PALÆOZOIC (from the Greek *palaios*, ancient, and *zoikos*, pertaining to animal life) cannot be well dispensed with, unless we should employ such phrases as newer *ancient life* period, and middle *ancient life* period.

THE ORDER OF SUPERPOSITION OF THE DIFFERENT FOSSILIFEROUS STRATA AND GROUPS OF STRATA.

	BRITISH ROCKS.	TERTIARY PERIOD.	CHARACTERISTIC FOREIGN EQUIVALENTS.*
Superficial deposits, or	Diluvium and Alluvium		Superficial deposits of gravel and other transported materials, covering the regularly stratified rocks in all countries, and sometimes stratified.
Newer Tertiary, or	Till of the Clyde Valley		Newest Sicilian beds, Loess of the Rhine, brown coal of Germany, Sub-appennine beds.
Pliocene	Norwich, or Mammaliferous Crag		
Middle Tertiary, or	Red Crag		Basin of the Loire and Garonne, Basin of the Rhine, Basin of Vienna, Molasse of Switzerland.
Miocene	Coralline Crag		Paris Basin, Basin of Brussels, Freshwater Beds of Auvergne in Central France, and of the South of France.
Older Tertiary, or	Bagsshot Sand		
Eocene	London Clay		
Crataceous System....	Upper Chalk (with flints)		
	Lower Chalk (without flints)		
	Chalk Marl		
	Upper Greensand		
	Gault		
	Lower Greensand		
Wealden Formation	Weald Clay, Hastings Sands, Purbeck Beds		
Oolitic System (upper)	Portland Stone, Portland Sand		
" (middle)	Kimmeridge Clay		
" (lower)	Upper Calcareous Grit		
	Coral Rag		
	Lower Calciferous Grit		
	Oxford Clay		
	Kellaway Rock		
	Combeash		
	Forest Marls		
	Great Oolite and Bradford Clay		
	Stonefield Shale and Fuller's Earth		
	Inferior Oolite		
	Calcareous Sand		
Liasic Group	Upper Lias Shale and Marls		
	Lower Lias Shale		

Original Correspondence.

TINNED PLATES FROM PUDDLED STEEL.

SIR.—I observe a letter in last week's Journal, signed by the Mersey Steel and Iron Company. Those who come forward to correct the alleged errors of a reporter should themselves be correct in what they say. Now, in this letter it is asserted that the Lord Chancellor observed "that this was a very proper case to be submitted to such a tribunal" as common law. No such words were uttered by the Lord Chancellor; but it so happens that he did say exactly the reverse. His lordship observed that this was one of those cases for which a legal tribunal was ill adapted, and ought to be referred to an "expert." And not only did his lordship suggest this course, but he named and suggested a party to whom to refer it, —the party named by him being Prof. Woodcroft.

As is declared, and no doubt the true, object of the letter referred to is that this matter should be placed correctly before practical men, it would, perhaps, have been as well to inform them that the whole subject had already been thoroughly investigated before the Attorney-General, by whom all the grounds of opposition were considered, weighed, and disallowed. The assertion that tin-plates have previously been made from "steel manufactured in the ordinary way" was clearly proved to represent only an abortive and abandoned experiment. Nay, the parties who attempted to make them admitted on affidavit that the manufacture was precluded by the high price of steel. Every one in the metal trade above the age of boyhood knows this. But had it been otherwise, is it any reason why a patent should not be valid for making an article from a different material at a great saving in cost, or, in other words, to great public advantage? To those who are in doubt on such a point it will be instructive to peruse the case of Crane v. Price, which clearly illustrates the law on this point. It may also be advantageous to consider Muntz's patent for yellow metal, made from the identical materials which had been in use for the same purpose from the earliest records of work in metals. That patent was opposed by powerful firms, and I need not say what was the result of their opposition.—*Liverpool, Jan. 17.* JAMES SPENCE.

THE COPPER TRADE—THE SMELTERS.

SIR.—Your correspondent "Copper," while answering the letter of Mr. Charles Low, respecting the profits, &c., of copper, refers but briefly to the question of smelting being a monopoly, though quoting the purchasers of ore for the last quarter. He states particulars of 12,925 tons of ore, in value £5,179, having been bought by six companies, many of recent standing. It is very rich of our friend "Copper" making such a statement. Let us quote the firms and quantities purchased, and value; we shall then be in a better position to see how matters stand.

	Tons	Value £
Copper Miners' Company	5,889	£30,857
Charles Lambert	2,934	16,033
Newton, Keates, and Co.	1,744	7,585
Pigot Alkali Company	643	3,991
Briton Ferry Company	158	1,056
Total	12,925	£65,179

Here we have Messrs. Mason and Elkington, a firm of some years' standing, taking no less than 45 per cent. in ore, and 47½ in value. The Copper Miners' Company, which is a very old company, takes 22½ per cent. in ore, and 24½ in value. Next, we have Mr. Charles Lambert, who has extensive mines at Coquimbo, therefore, in a measure, independent of the smelters' alliance, who did all they could to keep him from the Swansea river; such, for instance, as refusing to let him have the works formerly belonging to the Copper Miners' Company, now idle, having been purchased by Messrs. Vivian and Williams some ten or twelve years since to prevent them being worked again. To resume, this gentleman is down for 13½ per cent. in ores, and 11½ in value. The remainder we will leave to the credit of "Copper." The above three show purchasers in ores 8½ per cent., and in value 83½ per cent.

Where now, we would ask, is the open market so boastfully alluded to by our friend "Copper"? It is a complete farce for any one, attempting to blind those who are living on the spot, or at all acquainted with the nature of buying copper ores, to state that there is no monopoly about it. "Copper's" remarks on contractors for loans and the large ironmasters are perfectly absurd, and not worthy of a moment's consideration in connection with the gigantic monopoly of copper smelting.

Perhaps "Copper" can give a solution to the question formerly asked by me about the copper works on the Swansea River, which have been idle for so many years? and likewise whether the Spitty Works have been bought for a similar purpose, and, if report be true, re-set for the purpose of being converted to another branch of the metal trade, in which neither of the great smelting firms are engaged? If he can throw any light upon the matter he will place us in a better position as regards copper smelting being a monopoly to such an extent as such ugly facts have led us to suspect. Diogenes, out with your lantern!

SUN DIAL.

Swansea Vale, Jan. 17.

THE COPPER MINES OF SAN FERNANDO, CUBA.

SIR.—Having seen the name of Messrs. Arrieta, in a communication of Prof. Ansted in your Journal, connected with picking out "the eyes of the San Fernando Mines," I requested him through your Journal to favour me with a full and clear explanation of what he meant, not with regard to Cornwall or any other place, but with regard to San Fernando. He has deemed it more convenient, I presume, not to do so, but furnishes me, instead, with a scientific and abstract version quoted from Sir H. De la Beche's works, applicable and referring to Cornwall. I again beg of Prof. Ansted the favour of clearly and unmistakably mentioning by their names the precise localities or places which contained those eyes that, he says, have been picked out in San Fernando.—*London, Jan. 19.* J. J. DE ARRIETA.

EDUCATION OF COLLIERIES, AND THE USE OF MINING SCHOOLS.

SIR.—Everyone interested in the very important work of promoting the cause of education in mining districts, with special reference to educating miners in those branches which are so requisite to them in their subterranean occupation, must be glad to hear of the movements which are being made in this matter both in England and Scotland. It is unquestionably very important and highly necessary that suitable teachers and classes be provided in large colliery districts for the use of such colliers as are able and willing to take advantage of these provisions; but if we are to have working colliers in the class-room, we must have some efficient means of giving them pecuniary assistance whilst pursuing their studies. Allow me, through your valuable Journal, to suggest to proprietors and managers of collieries a plan of encouraging and assisting the young men in their employment who may be desirous of qualifying themselves for places of overmen or deputy-overmen in collieries, but who lack the means of taking advantage of the educational facilities which are now being provided for them. I would suggest that coalmasters and colliery managers appoint a time and suitable place for the examination annually of such young men in their employment as might wish to compete for a money-prize—say 20/-, or from that to 50/-; the prize to be awarded to the competitor who shows the highest attainments in a knowledge of the safe and economic working of coal pits, and in reading, writing, arithmetic, and mensuration. The money for the prizes may be subscribed by gentlemen in the respective colliery districts immediately interested in coal works, who, I have no doubt, would in most cases be assisted by benevolent neighbours not so directly interested; or a fund can be established to which the workmen themselves may have an opportunity of subscribing.

If the subject be fairly represented to the Government, and the necessary and probable good results of Government assistance well established, I have no doubt but that local subscriptions would be very liberally assisted by Government grants. The attendance for at least 12 months to the classes of one of the mining schools in the county must, of course, be made imperative on the successful competitor. I am persuaded that such a scheme would very materially improve the attendance of boys at the British and other schools already established in colliery districts, and raise the average age at which they leave school to commence work in the pit, so that their parents would be anxious to prepare them for obtaining the "Mining School Prize." It will also be a great incentive to home studies with the youths who have finished their school days, and are now at work in the pits, and to others after they left school to commence work; the

latter will be induced to make good use of what they have been taught at school.—*Bristol, Jan. 19.*

A WELL-WISHER.

GOVERNMENT MINE INSPECTION.

SIR.—I cannot agree in the comments that have lately appeared in your useful Journal regarding the Inspectors of Coal Mines. It is simply impossible for an Inspector to act as viewer (which is what the articles propose) over the whole of the vast number of collieries in his district; and nothing would so effectually sap his usefulness in searching out and fixing neglect upon the proper party if he himself were implicated.

Some of the collieries have a large number of separate pits, the workings in which are quite distinct. The Messrs. Knowles's collieries, the Worsley Collieries, the Fairbottom Collieries, John Haigreave's collieries, the Halton Collieries, to say nothing of the hundreds of others in Mr. Dickinson's district, are each of them work enough for one viewer. Indeed, take any one head, such as steam-boilers, the work that comes under it for a viewer could not be compassed by an Inspector, as proposed. There are as many steam-boilers in that one district as there are in the Manchester Steam-Boiler Association's list, and yet they have one head inspector and sundry sub-inspectors. Or, take winding-ropes; if their security has to depend upon the Inspector's inspection, a large number that were quite good when he saw them would be worked out before he could get back again; and so with the other heads. In short, inspection to be useful should aim at punishing neglect, and visiting collieries where there is reason to suppose that removable danger exists.

A COLLIER.

COLLIERY OPERATIONS IN THE UNITED STATES.

MID-LOTHIAN COAL MINES, VIRGINIA—CORNISH PUMPING-ENGINE, ETC.

SIR.—The mines of the Mid-Lothian Coal Mining Company are situated in Chesterfield county, 13 miles from Richmond, and ½ mile from the Richmond and Danville Railroad; a branch tract from that road connects the mines with their shipping point opposite Richmond.

This company has been formed, and in successful operation, for about 20 years. They now own about 2000 acres in the heart of the Chesterfield bituminous coal basin. The coal is considered of superior quality for gas, grate, and forge purposes, and finds a ready market. The average thickness of the seam of coal, varying from 4 to 50 ft., may be estimated at about 20 ft. Several vertical shafts, varying in depth from 550 to 771 ft., have been sunk through the vein at different points, and communication effected from one to the others, which gives good ventilation to the underground workings. By the aid of three large hoisting engines they are able to raise a large quantity of coal.

The company are now engaged in sinking a new shaft near the centre of their property, which they expect to complete in 12 months, and which when completed will open to them an additional valuable field of coal. About two years ago this company leased a small piece of land adjoining their mines, through which coal could be more advantageously raised than from any other point, and drove a drift into what was considered an unwrought piece of coal, when suddenly they cut into an old drift connected with extensive underground workings, filled with water; this communication was at this highest point of the company's workings; and as the old workings cut into were connected with vertical shafts 400 or 500 ft., and filled with water, the force with which the water poured into their works was enormous; it swept away most of the timbers in its route, washed up the railway tracks, knocked down large quantities of coal, in a few minutes filled the whole of the workings, and stood 40 ft. above the drifts in the principal vertical shaft. This accident occurred, fortunately, about midnight, when only 15 hands were below, 10 of whom were lost. Previous to this the water had been kept out of the mines by large buckets fixed in cages, and worked by the hoisting engines at night; but now so large a quantity had come in at once, and additional feeders had been cut, that it was found the whole power of all their hoisting engines, working day and night, was only sufficient to keep the water at bay, and that some additional power would be necessary to free the mines. By taking accurate measurements of the buckets, and keeping an account of the number raised, it was ascertained that the quantity coming in 24 hours was about 220,000 gallons. It was determined to erect a pumping-engine of sufficient power to drain the whole of the workings, leaving the hoisting engines for the exclusive purpose of raising coal.

After a due investigation in regard to the best kind of pumping-engine now in use, and by the advice of Mr. Wm. W. W. Wood, chief engineer U.S.N., it was decided to erect a Cornish pumping-engine of the most improved kind. Proposals were invited from the principal founders of the country for building such an engine. Those of Messrs. Merrick and Sons, proprietors of the Southwark Foundry, Philadelphia, were accepted.

The engine which has been furnished by them is a "beam Cornish;" its cylinder is 60 in. diameter, with 10 feet stroke of piston. The piston is packed with a single cast-iron ring, bored eccentrically, and slit and tongued on the finest side, being kept central and in contact by four springs. The beam, or bob, is of equal length—28½ feet from centre to centre of end pins, having wrought-iron catch-pieces. It is double, and besides being of the usual proportion for strength, is banded by heavy wrought-iron bands on the upper side, put on hot, and extending from underside of bosses around them, and over horns fast with beams on their upper side. The total weight of the beam and contra shaft is 19 tons. The cylinder is, of course, steam-jacketed, and cast as usual. The valve gearing is of the most improved kind, and, for the purpose of gaining room, the exhaust chest is on one side of the equilibrium pipe, which is central. The exhaust pipe is carried through a trough supplied with cold water from the condensing cistern. There are two cataracts, one being applied to regulate the opening of the exhaust and top steam-valves, and the other that of the equilibrium valve. The steam arm passes through a slot in the single plug-rod, and is shut by a carved tongue piece, whose position is controlled by a regulating screw, of length sufficient to give the requisite variation in cutting off. The valves are opened by weighted pistons moving air-tight in cylinders on the cataract floor. The air-pump is 26 inches diameter, 5 feet stroke, dipping into the condenser, and having in its bottom a grating carrying a circular gum foot valve; the bucket valve is also of gum; the delivery valve, or cover, of cast-iron, flat faced with wood. The injection valve is provided with a wing throttle, opened and closed with the exhaust. The vacuum attained is 28 inches. The condenser, and greater part of the air-pump, are immersed in the condensing cistern, and covered with water. A balance-bob is on the surface, connected to the main rod. Steam is furnished by three single fine boilers, 6 ft. diameter and 26 ft. long, set below ground level. The fire is 45 in. in diameter, containing at the firing end the grate, which is 6½ ft. long. The heated gases passing first through this fire, return at the sides to the front end, descend, and pass under the bottom into the connecting flue to the chimney. The connecting flue contains a heater 30 inches in diameter and 28 feet long, through which the feed water passes before entering the boilers. Over the front end is a steam drum, 30 in. in diameter and 13 ft. long, connected by pipes to stop valves in each boiler, and from which rises the main steam-pipe. The boiler shells, or plates, and flues are of ½ inch best Pennsylvania plates, the heads, or ends, are of 14-in. plates. The chimney is 4 feet square in the flue and 70 ft. high. The feed-water is supplied from an adjacent spring by a steam-pump 10 horse-power, the mine water being too much impregnated with mineral substances. This engine has been erected upon one of the deepest vertical shafts on the concern, which is 770 feet. The pitwork consists of three plunger and one drawing-lift; the whole of them are the same bore, as all the water accumulates to bottom being 14 in. diameter. The main rod is made of Pennsylvania pine; the first 240 feet from nose of the bob is 16 in. by 14 in., the next 240 feet is 14 in. square, and the remaining 240 feet is 12 in. square, thus making these rods 720 feet long. These rods are joined together by scrap-iron strapping plates, 16 feet long, with 16 screw-bolts in each plate, and each joint having four plates. These rods are supported the whole length on guides, or stays, not exceeding 30 feet distant; these guides are of wood, 7 in. by 10 in., fastened into the wall of the shaft, and are held together by screw-bolts and iron glands, which at any time can be easily adjusted. At each of these guides the main rod is protected by thin hard wood linings, and held to the rod by quarter glands, screwed. Each plunger-pole is screwed to the main rod by eight strong iron staples and glands, with a filling piece of wood 9 in. thick; the upper end of the stock works through a set of guides similar to those on the main rod. The main rod has four sets of catches, three of them on the down stroke and one on the up stroke, which prevents the whole machinery travelling beyond a given length of pine, 12 in. deep, fastened into the walls of the shaft in front of the main rod; and at one side of the rod cross timbers are again built upon these, 4 ft. wide and 5 ft. deep, fitted very snugly together, constituting 15 ft. of solid timber under the cistern, thereby preventing any spring or motion in the plunger or column on the return stroke of the engine. The stuffing-boxes are packed partly with gunn and partly with Russian hemp, either of these alone was found not to answer so well. The construction of the clacks introduced here are those commonly called the griddle clack, consisting of a cast-iron shell, or lid, 1¾ in. thick, having a hinge which works upon a pin or bolt supported by two loops fastened to the outer part of the setting. This hinge lifts about 2 in. in the loops at every up stroke of the water. The shell has a groove 1¼ in. deep by 1 in. wide all around; shaped to the face of the seat in this groove four slips of sole leather are fastened on their edge, leaving a projection of ½ inch for a seat upon the seat. The water way through these clack-seats, and throughout the entire columns, are the same in diameter as that of the plungers. Some of these clacks have been at work over six months without being re-greased.

The engine was started to work in last May, and in a few months drained the mines, and the raising of coal has been resumed with vigour. This is the first pumping-engine of the kind which has ever been erected in this State; it works in admirable order, and for quality of material and workmanship reflects great credit to the builders. The company are, moreover, entitled to much credit for the foresight shown in providing, in the erection of this engine, a surplus power, which will enable them to extend their operations to almost any extent. The hoisting engines are of the ordinary kind of high-pressure, and coal is raised by the cage and guide-rods with four-wheel boxes, which carry ½ ton of coal in each box; and, when in full speed, it is estimated to raise 60 of those boxes per hour with each engine. In view of the wide extent of territory, the superb machinery erected,

and other facilities for making large and profitable returns, this company may congratulate themselves as only on the eve of doing a wide and profitable business for many years to come.

JOSEPH BUZZO.

Mid-Lothian, Chesterfield county, Virginia.

LADY BERTHA.

SIR.—Adhering still to my report, I refer Capt. Metherell to Murchison's *Review of British Mining*, where he will find the whole of my statements fully corroborated by Capt. Thomas Richards. In his report, which is the only disinterested one that has been submitted since my inspection, the winze for the first 8 fms. is valued at 5 tons per fm. for its whole length (from 9 to 10 ft.).

This question of the value of the winze being settled, so far as I am concerned, I now turn to a matter of much greater consequence, to which I wish to direct Capt. Metherell's particular attention. On Dec. 3, his report in your Journal states that the lode in the cross-cut in the 41 fm. level had been cut into, and was worth 4 tons of ore per fathom; that he had got rocks of ore to surface, full 1 cwt. each; and that no north wall had been reached. In another column of the same Journal I find the following paragraph:—"A most important discovery has been made in driving the cross-cut from the engine-shaft in the 41 fm. level (bottom of the mine), where the lode is turning out from 4 to 5 tons of rich yellow ore per fathom, and no north wall yet. Streams of water are gushing from the end, which shows there is even a more valuable lode ahead. Immense rocks are being drawn to surface, weighing upwards of 1 cwt. each."

This discovery in the bottom of the mine being, of course, considered of great importance, my attention was called to it; and on a careful examination of the cross-cut, I found the lode composed of capel, quartz, mica-schist, iron, and stones of ore. Capt. Thomas Richards and other agents of experience who have since inspected it state that the lode will not pay for taking away.—*Devon Great Consols, Jan. 18.* WILLIAM CLEMO.

TOLVADDEN MINE—ITS STATE AND PROSPECTS.

SIR.—In passing through the Redruth and Camborne districts, amongst others I visited a mine wherein a discovery was made some eight months ago, since which they have sunk and driven some few fathoms through an ore lode, yielding in the aggregate only about 60 tons of moderate quality ore, risen so slowly that up to this time they have not even a slide to receive it, and only four dressing girls on the mine. Tolvadden has been worked about two years, and returned so early and profitably that it was unnecessary to make a call, and at this hour there is a balance in the purser's hand, independently of the 360 tons last sampled; the sales having steadily risen, and during the last year about 11,000/- worth of copper ore has been sold. Now, to be in this position what has it done? Built two engine and boiler-houses, smithy's and carpenter's shop, five dressing-houses, nine slides, with large floors and appurtenances, one captain and three whinmounds, balance-pit and engine-pool; bought and erected a 40-in. pumping-engine, and a winding-machine, balance-beam, captain-shears, horse-whims, with 60 fms. of pit-work, &c.; sunk 295 fms. of shafts and winzes, driven 365 fms. of levels and cross-cuts by and through the lode, requiring a proportionate quantity of timber, coals, and iron, with numerous other requisites well known to miners, and common to all mines, preparatory for sound and advantageous working, and lasting lords' dues. Now, I ask any impartial man what Cornish mine has ever sold more in this time without a call? Or what mine shows more work done for the same cost?

Notwithstanding the profits, many have, for various unworthy reasons, attempted to decay this mine; they will, however, be compelled to admit much more than they have yet seen realised. One of the wheelers said, five samplings since, that he could not see another in the mine; then oracles No. 2 and No. 3 doubted the 10 fm. level, then after the 20, and of course the 30 also, which is the bottom of the mine. The value of their opinions, the enormous sales, 64 fathoms long of tribute already set, at the average of 5s. 4d. in 12 ft., in the back of the 20, standing nearly whole to the 10 through the whole mine, besides the pitches above this level, and two courses of ore in the 30, or bottom end, just cut into, shall antagonise for miners' judgment. Now, I will ask if the former mine, and others equally meritorious and progressive, are selling at about 40,000/- in the market, what should be a proportionate price for the latter? I have been so convinced of its merits from most palpable evidence that I have written these few words of plain unguaranteed facts to enable the public to have a knowledge of its real position, and as most of these expenses are not recurring, judge therefrom as to its capabilities for large and immediate dividends. There is one thing very certain in the anomaly of the mining market, that shares now quoted from 5*s.* to 6*s.* in Tolvadden are worth in visible value four times as much as they were when selling freely at 10*s.* per share, 18 months since.

Marazion, Jan. 12.

ANTI-EAMBOOZE.

THE OLD TOLGUS UNITED—NEW SHARES.

SIR.—As your report of the proceedings at the Old Tolgus meeting, so far as the remarks attributed to me are concerned, is calculated to convey an erroneous impression, permit me to say that, with one exception, I was the only individual present who expressed an opinion adverse to the issue of new shares, as I considered that to make a call for the

latter being principally used for testing small parcels. These will crush 400 tons of quartz per week to fine powder, the escapes being covered with a wire-gauze having 256 meshes to the square inch, and a good supply of water is obtained from the Creswick Creek, which flows in front of the works. These facts, coupled with the knowledge that the company are supported in every reasonable manner by Government, justify the opinion which so many interested in the Port Phillip Company entertain that, although the dispute with the outsiders may occasion some little delay in fully developing the resources of the company, no permanent injury will be experienced.

Meetings of Mining Companies.

WHEAL UNY MINING COMPANY.

A quarterly meeting of adventurers was held at the offices of the company, 7, Token-house-yard, on Wednesday.—Mr. P. L. HINDS in the chair.

Mr. W. MUNN (the secretary) read the minutes of the previous meeting, which were confirmed.

A report from Capt. J. Rose was then read, from which the following is condensed:—

The 90 had been driven 4 fms. west of the engine-shaft, driving by six men at 18. per fm.; they had just cut into the south part, and had found good stones of tin. They have suspended the driving of the 80; they have ten men stopping the back of this level, at 71. per fm., lode worth 18f. per fm. The 50 is being driven west by four men, lode worth 6f. per fm. They had 50 tributaries working on the tin lode. The new shaft has been sunk 8 ft. below the 50, sinking by nine men, at 35f. per fm. The 50 has been extended 4 fms. east and 3 fms. west of the new shaft; this level, it appears, is not on the main part of the lode, but in driving west in the 14' he met with what he was fully persuaded was the main part of the lode; they had cut into it 18in., and it had no south wall—the lode was composed of quartz, flookan, mudi, and spots of copper ore, the ground around being of a highly favourable character. East of the new shaft the men had been put to drive south, where it is thought the main part of the lode is. The 40 was driven 28 fms. west of the new shaft, through a very kindly lode, 2 ft. wide, containing stones of copper ore. 15 fms. west of the new shaft they had put up a rise, through a lode worth 14f. per fm. The 40 had been extended 48 fms. east of the new shaft, through a kindly lode.

The following statement of accounts was then submitted:—

Balance last audit	£ 147 6 7
Mine cost, Sept., Oct., Nov.	1669 15 10
Merchants' bills, Sept., Oct., Nov.	695 13 0
Lord's dues	131 14 5
Office expenses, discounts, &c.	42 18 1 = £2687 7 11
Tin and copper ore sold	£2379 10 5
Calls received	128 0 0 = 2507 10 5
Leaving balance against mine	£ 179 17 6

The CHAIRMAN observed that although the tin returns had not been so good this quarter as they were in the previous one, still they were very encouraging; and it was satisfactory for them to know that they not only had a good tin mine, but that they also had an excellent copper mine. The *Mining Journal* had frequently called attention to the richness of this mine, and the great probability of the shareholders receiving a very large return for their outlay. The mine had lately been examined for a private person by Mr. Evans, who had reported most favourably upon it, and had further stated that so far as present appearances went the mine was as yet only in its infancy. During the time the present directors had been in office the greatest exertions had been made to push on the works; and he considered that the remarks made on the management by a correspondent in the *Mining Journal* were uncalled for, and dictated by private motives.

It was proposed by the CHAIRMAN, seconded by Mr. SPALDING, and unanimously resolved, that a call of 2s. 6d. per share be made, to meet the current expenses. The present directors were re-elected; but, in consequence of the death of Mr. Wood, Mr. R. Hackvale was elected to fill his place at the board.

Thanks were voted to the directors for their able management of the affairs of the company.

ST. DAY UNITED MINING COMPANY.

A special general meeting of shareholders was held at the company's office, 27, Austin-friars, on Monday, Mr. J. BALSTER in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.

The CHAIRMAN said that the business of the present meeting was to take into consideration the resolutions passed at a meeting held on Dec. 23, with a view to their confirmation or otherwise; and in order to forward the business of the meeting the committee had framed a set of resolutions for the consideration of the shareholders present. And if any difference of opinion should exist, which he did not anticipate would be the case, each would show his honesty of purpose by a temperate use of language in his observations; for if they were honest men they had but one object in view—the success of the undertaking. He would not detain the meeting by any further prelude, except by saying that he believed he was born out by the manager's report, and from reports of other competent men, that in St. Day United Mines they have a real property, and from which all who had embarked in the undertaking were justified in anticipating the most favourable results. The requisition calling for the special general meeting was, in the course of a few days, signed by shareholders holding 10,018 shares; this showed the general feeling. The set of resolutions framed by the committee, as he had before stated, would be brought before them for their consideration.

Mr. KING read the resolutions passed at the meeting on the mine.

The SECRETARY stated that as the committee considered a great portion of the resolutions referred to were not in accordance with the views of a large number of shareholders, they submitted the annexed propositions:—“That the said resolutions (with the exception of that part of the second resolution commencing with the words ‘that all copper ore,’ and ending with the words ‘bankers, Redruth,’ and the whole of the third resolution) be confirmed; and that as the said portion of the second resolution, and the whole of the third resolution, are not in accordance with the wishes of the shareholders (holders of 7743 shares) represented by proxy at the meeting on Dec. 23, the same be, and are hereby, rescinded.”

Mr. HALLETT, seeing that the general feeling of the shareholders was in accordance with the terms of the resolution, he would move that the resolution do pass.

Mr. E. BOYLE, in seconding the resolution, observed that the motive which induced him to make a few remarks arose from it being just possible that it might be conceived that something like a spirit of antagonism existed between some portion of the shareholders and others. Now, on his part, he was satisfied that spirit did not exist, for the one common feeling was so to conduct the mine that it should be placed in a much more satisfactory position than it has hitherto held. In order to bring that about, it was deemed essential that a separation should take place between those who had the management of the operation and those having the control of the finances. That this was desirable he thought every one would admit who had an interest in the undertaking. The manager would then be under the control of the committee, and would every fortnight furnish them with his report of the operations. All must admit that this course would make their affairs prove satisfactory, and meet with the concurrence of the whole body of shareholders. It was desirous that gentlemen in Cornwall should know that they had a strong wish to act in unison with them, and, therefore, they thought it best to pursue their present course. The better management of the mine would reconcile Cornishmen to the change desired. The arrangement proposed by the committee would establish their mine in the confidence of the public, and remove the feeling that has heretofore existed in reference thereto, which, of course, would be for the benefit of the shareholders. Taking into consideration the prospects now before them—that the call would free them from everything, and that their returns for the future may be legitimately depended upon—there was a fair reason to hope that dividends would be the recompence for the patience they had manifested, and which they had a right to expect.

Mr. GOULD asked if every liability was charged up?

Mr. F. PARSONS, in answer, stated that everything was charged up.

Mr. CULDS (who appeared on behalf of the Messrs. Williams) said those gentlemen naturally felt very desirous to have their interests represented at that meeting, as great interests were concerned in that undertaking, not only as respects the St. Day United in particular, but also adjoining mines. As Messrs. Williams were very anxious that everything should be done for the best interests of all, they wished him to attend and represent them, their desire being that nothing should be done hastily or unadvisedly. He was not aware what the nature of the resolutions was that were to be submitted to the meeting, but he was desirous to act in furthering the interests of all concerned in the speedy development and success of this undertaking. He was bound to state their wish was that no immediate action should be taken at present, but that the matter should be referred to a committee of delegation for their consideration, and to see what was proposed should be for the benefit of the mine. He would, however, make no further observations, because he was convinced that the feeling of the shareholders present was for the general interests of all concerned.

Mr. NINNIS suggested that the whole of the resolutions should be read, and then be taken *seriatim*. He was glad to see the spirit that had been evinced by Messrs. Williams, and he should think it would be desirable for some gentleman of their committee to see what Messrs. Williams have to propose; it might be that they were anxious that what they were then proposing was that which they themselves desired. He always found that Cornish suggestions should be well received. He would rather see the change carried out by agreement, by mutual understanding, than by any absolute act.

The CHAIRMAN considered it quite clear that the feeling in London, both with the committee and shareholders, was that there should be a unity of action, rather than division. They had thrown on the olive branch for peace.

Mr. DUNSFORD could not see that the course proposed was in any way hostile or antagonistic. They were not asking for one atom more power; and unless it were shown that the gentlemen of the committee are unfit to have their names attached to the documents, he could see no objection to the resolution.

Mr. CULDS did not think the resolution in any way hostile; and feeling the importance that nothing should be done hastily, he had been directed by Messrs. Williams to attend that meeting; and he must say that he had received from the committee the greatest courtesy.

Mr. E. BOYLE said, if there were any conflicting interest between Messrs. Williams and themselves, there would then be a necessity for an adjournment of that meeting; but they were actuated by one desire—to make their property more valuable than it had hitherto been; and he would guarantee the best thanks of the committee for any communication offering suggestions that will tend to the advancement of the mine. It was manifest that Messrs. Williams were with them, in endeavouring to benefit themselves as well as every one connected with the mine.

Mr. NINNIS expressed his willingness to act with the gentlemen present.

Mr. E. BOYLE did not wish to speak about the power of their majority, for he trusted that the resolutions proposed would meet with general concurrence, and be adopted.

Mr. F. PARSONS said that the St. Day United Mine had passed through greater difficulties than any other mine in the county of Cornwall. There had been paid 6000*l.* out of the profits for the purchase of the Consols, and 3500*l.* had been paid in dividends. The present price of tin and copper made a dividend-paying mine now of St. Day United.

The resolutions were then unanimously carried.

It was then resolved that the Messrs. Tweedy and Co., of Redruth, and Messrs. Glyn, of London, be the bankers of the company, and that all copper ore and tin bills be made payable to the committee of management, and sent direct to the secretary, at the London office; and that all payments be made by cheques, signed by two members of the committee, and counter-signed by the secretary.

Mr. F. PARSONS considered that it was incompatible for the manager of the mine to be on the committee, and, therefore, he wished to tender his resignation.

It was then resolved that Mr. F. PARSONS having tendered his resignation as a member

of the committee, the same be accepted, and the appointment of Mr. Hallett by the committee be confirmed.

On the proposition of Mr. HALLETT, seconded by Mr. NINNIS, it was agreed that the office of auditor, at a salary of three guineas per month, be dispensed with, and that the thanks of the meeting be given to Messrs. Broad and Morcom for their past services.

On the proposition of Mr. PARSONS, seconded by Mr. GOULD, it was resolved that the sum of five guineas per month be allowed to the committee of management, to be divided *pro rata*, according to attendance.

Mr. BOYLE proposed, and Mr. DUNSFORD seconded the proposition that in future the general meetings shall take place every four months.

The CHAIRMAN, in responding to the vote of thanks passed to him, said the committee were unanimous that there should not be anything kept in the back ground, but that the accounts should be open to every shareholder who chose to come and examine them; he did not like secrecy. After thanking the meeting for the compliment that had been paid him, the proceedings terminated.

ACADIAN CHARCOAL IRON COMPANY.

An extraordinary meeting of shareholders was held at the company's offices, Old Broad-street, yesterday.—Mr. A. ROEBUCK, M.P., in the chair.

Mr. BAZALGETTE (the secretary) read the notice convening the meeting. Letters were also read from the company's manager and financial agent in Nova Scotia, explaining the temporary stoppage of the works, resulting from measures which had been taken for the protection of the company's interests, and fully alluded to by the Chairman. The manager's report, under date Londonderry, Nova Scotia, Dec. 28, 1858, was then read, as follows:—

Upon my arrival in Nova Scotia, my attention was called to a number of boulders of iron ore, scattered on the surface of a part of the company's property near Martin's Brook. After purchasing an adjoining lot, so as to obtain access to the ground in question, and also to secure drainage, several trial pits were sunk, which resulted in showing, as stated in mine of June 30, 1858, that there is one, if not two, distinct veins of ore, of an aggregate thickness of 12 ft., and requiring only 42 to 45 cwt. of ore to produce 1 ton of pig-iron. A large quantity of ore has been raised here, and the cost for 13 months (Nov., 1857, to Nov., 1858, inclusive) has been 12s. Id. currency per ton (9s. 8d. sterling), including all dead-work, except the main openings; this is delivered at surface. The cost is of course higher than it can now be raised for, as many of the trial pits and levels, from the ground not being known, were expensive, and ultimately of little service.

Another alteration of the greatest consequence has been carried out during this year—the substitution, in all cases where practicable, of piece-work for day-work. This has been carried into operation completely wherever practicable, and has had a sensible effect in reducing the cost. These, together with other minor improvements, enabled the iron to be made and delivered f. o. b. in St. John's, for the past nine months, at a cost of 6s. 2d. per ton, although during seven of these months the ore used has been a mixture of the Martin's Brook and Mountain.

As before stated, the want of a continuous supply of water has had a very injurious effect upon the cost of production, and has several months raised the cost 10s. to 12s. per ton. Early in 1858 steps were taken to erect the blast engine, so as to obviate any further inconvenience from this source; but, from the expenditure having to be curtailed, this has made slow progress, nevertheless the foundations of both engine and boilers are nearly completed, as well as the engine-house; a further expenditure of about 400*l.* sterling will complete the erection.

In addition to the above, in 1857 there were erected 10 new dwelling-houses, a shed for storing coal, and a carpenter's shop.

In reference to the improvements which have been suggested for the further reduction of cost.—1. A new road to Martin's Brook; at first a cart-way made, at a cost of 240*l.*, which afterwards may be converted into a tramway when desirable; this would enable us to get the transport of the ore reduced 2s. per ton; and, as the road will be in the direction of the woods, it will save something further in transport of charcoal.—2. The completion of the erection of the blast-engine at a cost of 400*l.* sterling; the saving from this source will be direct and indirect, and may be fairly estimated at not less than 5s. per ton. It must be also understood that if a second furnace be erected the blowing-engine then becomes absolutely indispensable.—3. A new road to the shipping place, a distance of 5½ miles; the present road is very hilly, and nine miles in length. A cart road will cost, including the value of the land, 1360*l.* sterling, but a part of this sum may, I think, be got from the Provincial Government, as a grant to assist in opening a public road. There is a road already built for 2½ miles of the distance, which, though not a very good one, will do for some little time, and in the event of any assistance not being obtained from the Legislature, this may be made use of for a time, thus the sum required by the company would be about 600*l.* sterling.—4. The erection of a steam-hammer, or hammer driven by steam-power, with three additional puddling furnaces, costing altogether 1100*l.* sterling. This will enable the company to manufacture about 1500 tons of blooms per annum, at a cost, delivered in Liverpool, of 10*s.* sterling per ton. With the foregoing improvements made, pig-iron can be delivered in Liverpool at 5s. 10*d.* per ton sterling.

The foregoing are the improvements that I most strongly recommend being carried into operation first; these can be made with a comparatively small outlay, and will not require any addition to the stock of material to any considerable extent.

In addition to the works already mentioned, the following are recommended for still further reducing the cost of the iron; but as these will require a very much greater outlay, it will probably be found desirable to delay them for a time.—1. Ovens for burning charcoal.—2. The erection of a second blast furnace.—3. The conversion of the proposed road to the shipping place into a tramway.—4. The conversion of the proposed road to the shipping place into a tramway.

Should these latter suggestions be carried out, it will enable pig-iron to be delivered in Liverpool at 5*s.* sterling, and blooms of about 9*s.* to 9*s.* 10*d.* per ton.

The CHAIRMAN then read the resolutions requiring confirmation, which were put securitatis, and unanimously confirmed. They were as follows:—

“That the following provisions in lieu of, or in addition to, the regulations of the company contained in their Deed of Settlement, be now made, under the provisions of the Joint-Stock Companies Act, 1856–57.—1. The directors may attach to 2600*l.* of the original shares in the company, which have not been issued or allotted, a preference or priority in the payment of dividend, at and up to such fixed rate not exceeding 10 per cent. per annum, as they may, by resolution of a board of directors, determine.—2. Such preference shares shall be entitled to a dividend, in preference and priority to all other shares in the company, up to the rate so fixed, and to participate rates with the other shares in all further dividend, after the other shares shall have also received a dividend up to the rate so fixed.—3. If the profits of the company in any year shall not be sufficient for the payment on the preference shares up to the rate so fixed, no part of the deficiency shall be paid or made good out of the profits of any subsequent year.—4. The said preference shares shall be apportioned, offered, and issued, in the manner provided by Article 18, as to new or additional shares.—5. In all other respects the provisions of the Deed of Settlement shall apply to the said preference shares in like manner as to the other original shares in the company.—6. Articles 93 and 107 of the Deed of Settlement, and all other provisions therein contained, inconsistent with this resolution, shall be taken to be altered or modified hereby.”—That the rate of dividend payable upon such preference shares shall not exceed 8 per cent.

The CHAIRMAN observed that since last meeting experiments were being conducted at Woolwich, from which satisfactory results were expected. The Government depended very much upon the chemical analysis of the iron, without testing its absolute strength and quality practically.

The SECRETARY, in answer to a question from Mr. Horsley, stated that the available assets of the company in process of realisation were very largely in excess of the outstanding liabilities.

The CHAIRMAN, in reply to a question, observed that the arbitration, which was being conducted by scientific gentlemen, appointed respectively by Her Majesty's Government and the company, for the purpose of testing the fitness of their iron for the use of Her Majesty's service, was proceeding satisfactorily, and the result would, he believed, be ascertained in a few days, and made known.

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EAST BASSET.—W. Richards: Not much alteration in the 30 fm. level and since my last. The rise in the back of the 30 is worth 200*t*. per fm. The lode in the winze under the 60 is worth 60*t*. to 70*t*. per fm., and the stopes 100*t*. per fm. We sampled, on Tuesday last, 157 tons of copper ore, estimated value 250*t*. average price 16*t*. 9*s*. per ton.

EAST CHINNIS.—J. Dale, J. Tredinnick, Jan. 18: The lode in the 112 end, east of Smith's shaft, is 3 feet wide, worth 3 tons of ore to the fathom. In the 100 end east the lode is not so productive as last reported, will produce about 2 tons of ore to the fathom. In the winze sinking under the 100 we have not taken down any lode during the week. We hope to communicate this to the 112 very shortly, which will enable us to stop some of the best of our ore ground. The various stopes in the back of the 100 and 112 are without alteration since our last report. The men will return to Smith's shaft from Pembroke as soon as we can get the necessary pitwork. Pembroke engine will stop to night, the men are working well in getting the materials to surface.

EAST CARM BREA.—Thos. Glanville, Jan. 15: Tut-work Setting: The 14 to drive east of the engine-shaft by six men, at 2*t*. 10*s*. per fathom—lode 18 in. wide, composed of spar and copper ore; the 14 to drive west of the engine-shaft by six men, at 7*t*. per fathom—lode 18 in. wide, composed of gossan and grey ore; the engine-shaft sinking by twelve men, bargain unexpired.

EAST DAREN.—Jan. 18: In the 22 cross-cut, north of Taylor's shaft, we have still some small branches of lead ore, but not sufficient to set a value on. In the 80 fm. level west the lode is 2 ft. wide, composed of clay-slate and lead ore, yielding of the latter 1*t*. 10*s*. per fm. In the 80, west of winze, on the north part of that lode, the lode is 4 feet wide, composed of clay-slate, spar, and lead ore, yielding about 1*t*. 10*s*. of lead ore per fm.; in the same level, east of winze, the lode is 2*t*. 10*s*. feet wide, composed of clay-slate and some branches of lead ore, yielding 12 cwt.s. of lead ore per fm.; in the winze sinking below this level the lode is not looking so well for lead ore as when last reported, now yielding 1 ton of lead ore per fathom; the stopes over the back of this level, two in number, are yielding 1*t*. 10*s*. of lead ore per fm. In the winze sinking below the 60, 20 fm. west of same, at present the lode is small and unproductive; in the stops from 30 to 40 fm. west of same the lode is 3 ft. wide, composed of clay-slate and lead ore, yielding of the latter 1 ton 12 cwt.s. per fm.; in the 68 cross-cut, north of Reed's shaft, we have intersected some branches of lead ore, but have not reached the north part of the lode. In the 56, west of same, the lode is 3 ft. wide, composed of clay-slate, yielding some stones of lead ore, and looking more promising. In the 68, east of winze, 14 fm. west of Reed's shaft, the lode is 2 ft. wide, composed of clay-slate, carbonate of lime, and lead ore, yielding of the latter about 1 ton per fm. In the 44, west of Reed's shaft, the lode is disordered by broken up ground. The stopes throughout the different levels still continue yielding fair quantities of lead ore. The 44, east of cross-cut, south of Loden's engine-shaft, is disordered by broken ground, and we have taken the men to cut the ground for a 40-foot wheel-pit. There are no other alterations to notice in any other part of the mine. Our dressing and all other surface operations are progressing favourably.

EAST GUNNIS LAKE AND SOUTH BEDFORD CONSOLS.—J. Phillips, Jan. 18: There has been no change taken place in the stopes or levels worthy of communication during the past week.

EAST PROVIDENCE.—Wm. Hollow, Thos. Uren, Jan. 18: Harvey's shaft is sunk 10 fm. below adit, or old workings. The shaftmen commence to-day driving a cross-cut south in the bottom of the shaft, to intersect the lode. Poole's shaft is sunk 9 fm. below the 10; this shaft will be down to a 20 about the end of this month; the lode here is at present small, on an average 6 in. wide, composed of yellow copper and mundic. The adit end is driving west from Poole's shaft by three men, at 3*t*. per fm.; the lode here is 15 in. wide, composed of spar, mundic, and peach—or of a promising character. We have commenced sinking a winze below adit on the course of the lode, about 20 fathoms east of Poole's shaft; this winze is sinking by two men and one boy, at 4*t*. per fm.: here we have not taken down the lode since we commenced.

EAST ROSEWARNE.—J. James, Jan. 15: In the 43 cross-cut, north of engine-shaft, the ground is much as last reported. In the 22 east, on the north lode, the lode is about 9 in. wide, yielding good stones of copper ore. We have at this point intersected another caunter branch, from 2 to 3 in. wide, yielding rich arsenical and native silver; this is about 4 fms. east of the former. In the 22 north, on the caunter, the lode is 1 ft. wide, producing spots of copper and silver ores, but not to value. In the rise above the 22, on the caunter intersection, the branches are yielding some very good arsenical and a little native silver; also a good branch of copper ore, 6 in. wide. We have no lode in the 6 cross-cut, but expect it shortly.

EAST TAMAR CONSOLS.—G. E. Tremayne, Jan. 18: The lode in the 52 south is 3 feet wide, principally fluor-spars and lead, of the latter worth 8 cwt.s. per fm. In this level north the lode is 2*t*. 10*s*. feet wide, composed of mundic, fluor-spars, and yielding about 5 cwt.s. of lead per fm. The lode in the 40 south is 3 feet wide, and at present producing 8 cwt.s. of lead per fm. The stopes in the back of this level south are at present divided, being divided by a horse of kilias, but which we do not expect will continue.

EAST WHEAL FALMOUTH.—W. Hancock, Jan. 18: The engine-shaft is being sunk 8 fm. 2 ft. below the 30; the ground is just as last reported, spare for sinking. The ground in the end west, on Chennall's lode, is without alteration since my last; lode still split in two branches, producing 6 cwt.s. of lead per fm. No. 3 stope, in the bottom of the 20, on Chennall's lode, is suspended for the present, and the men put to rise in the back of the 30 to communicate to the latter bottom for ventilating the 30 end; the lode in the rise at present is small, producing stones of lead, not enough to value. The stopes in the back of the 20 west, on the north part of Chennall's lode, will produce on the average 10 cwt.s. of lead per fm. We have not intersected any branch worth notice in the 20 cross-cut south as yet. The 10 end west, on the north part of Chennall's lode, is producing stones of lead and 5 cwt.s. of jack per fm. No change to notice in any other part of the mine. We are getting on in the dressing department as fast as the short days will admit. We have 26 tons of best lead put to pile.

EAST WHEAL RUSSELL.—J. Goldworthy, Jan. 17: If the ground continues in the 88 end as at the present time we may fairly calculate on seeing the north part of the lode in the 88, which we had the ore upon in the 66, in three or four weeks from this date.

—J. Goldworthy, Jan. 20: There is no change to notice in the 88 since last reported; all goes on well we shall commence cross-cutting north in the 88 some time next week, when in a short time I hope to see the north lode; the lode in the back is up 7 fms. 2 ft. 6 in.—lode small and poor. Homersham's shaftmen are sinking below the 68; there has been but little done to the sinking this week, the men having been engaged in taking up the water around the shaft. The driving of the cross-cut north's Hitchins's is going on favourably. The 78, east of Homersham's shaft, is driven 7 fms. 2 ft. 6 in.—lode small and poor. The lode in the 66 end is showing indications of improvement. The tribute plates are without change to notice since last report.

EAST WHEAL TOLGUS.—Jan. 15: In the 45, east of the engine-shaft, the lode is 10 in. wide—unproductive, but is letting out more water than usual. In the 34 east the lode (horse and branches) is fully 5 feet wide, unproductive; we intend to keep the end on the south part, which we consider to be the main part of the lode. We have about 2 fms. more to make John's shaft complete to the 34. The lode in the 22, east of John's shaft, is 4 feet wide, consisting of jack, mundic, spar, and some saving work for tin and copper ore, producing 1 ton per fm. of the latter; I am almost sure we shall have a good bunch of ore when the 34 is brought up. In the stope east, and adjoining John's shaft, in the bottom of the 22, the lode is yielding 2 tons of ore per fm. The stope in the bottom of the 22, east from engine-shaft, and west of Stephen's winze, is yielding 3 tons of ore per fm. The lode in the 12, east of John's shaft, is 2 ft. wide, producing good stones of ore, and saving work for tin. The stope in the back of the 12, east of John's shaft, is yielding 2 tons of ore per fm. In the 12, driving east from the cross-cut, on the south lode, the lode is small and poor. The adit end east, on the north lode, is poor; the lode is small.

EAST MOUTH.—W. Skewis, J. Nicholls, J. Roddis, Jan. 19: We have no alteration from last report worthy of notice, except in the 50, where we have driven a cross-cut west, and intersected a lode about 2 fms. west of the east lode, and are pleased to state it will turn out 8 cwt.s. of lead per fm., and also in the 10 south, where the lode is looking very kindly, and producing 4 cwt.s. of ore per fm. Some important points of the mine are looking kindly, and we hope to report more favourably.

FOWEY CONSOLS.—P. Rich, Chas. Merratt, S. Sampson, Jan. 17: We have cut the cross-course in the 250, east of Bottrell's shaft, on Trathan's lode. The lode in the 250 east is 6 ft. wide, and will yield 3 tons of ore per fathom. The lode in the 240 east is 2 ft. wide, producing saving work. The lode in the winze sinking in bottom of the 240 is 8 ft. wide, and will yield 8 tons of ore per fathom, worth 9*t*. per ton. The lode in the 230 and 180 is still poor. Bottrell's lode, in the 260, is about 2*t*. 10*s*. wide, and will yield 2 tons of ore per fathom. In the 240 the lode has not been taken down since last reported; the winze sinking in the bottom of this level will yield about 3*t*. 10*s*. tons of ore per fathom, worth 9*t*. per ton. The lode in the 230 east is 5 ft. wide, producing saving work. The lode in the 200, east of Union shaft, will yield 1*t*. 10*s*. tons of ore per fathom, worth 8*t*. per ton. The lode in the 170, driving west of Union shaft, is producing saving work. We have holed the piece of ground mentioned in our last report from the 60 to the 120, and have commenced driving two ends in the 80, and hope shortly to drive a level or two more in this high piece of ground. The lode in the 80, driving east of Cocks' shaft, on Johns' lode, will yield 2*t*. 10*s*. tons of ore per fathom. The lode in the 80 west will yield 2 tons of ore per fm. The ground in the 40 cross-cut, driving north on cross-course, is spare for driving. The lode in the adit driving west, north of Carregoff shaft, on Rashleigh's lode, is 5 ft. wide, and will yield 1 ton per fathom. The lode in the adit, driving west in Foster's Wood, is about 1*t*. 10*s*. wide, and produces occasionally spots of ore.

GAWTON COPPER.—J. Gill, Jan. 15: In the 50 fm. level west the lode is from 4 to 5 feet wide, producing stones of copper ore, and looks promising for improvement. The lode in the 50 east is 4 feet wide, consisting of capel, mundic, and prian, and assumes a more kindly appearance; the ground is also favourable for driving. In the pitch in back of the 36 no lode has been taken down during the past week. In the pitch in the 24 the lode is 7 ft. wide, and worth 6*t*. per fm. The lode in the stopes below the 36 continues its usual size—from 7 to 8 ft. wide, and worth 10*t*. per fm.

GELLIRHEIRON.—R. Northrey, Jan. 18: The lode in the 20 is 3 ft. wide, no lead to value. The lode in the 17 east is 2 ft. wide, worth for lead 4 cwt.s. per fm. The lode in the rise in back of the 49 is 4 ft. wide, with a mixture of lead. The stopes are yielding about the same quantity of lead as when last reported.

GERNICK.—J. Barnett, Jan. 18: There is no particular change to notice in the operations of this mine for the past week. The 36 end, on Gernick's lode, continues just the same as when last reported.

GOGINAN.—Jan. 18: The lode in the 10, driving east of the winze in the bottom of the 50, or deep level, 40 fms. west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.; the lode in the same level, driving west of winze, is 3 feet wide, but unproductive at present, being still disordered by the slide, and from all appearance this end will improve again shortly, as we have nearly got through the slide; these two points are let to six men, to drive east and west of winze at 6*t*. 10*s*. per fm.; including drawing water and stuff. The lode in the 10, east of the winze, 70 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west, is yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving east of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving east of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving east of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. 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The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving east of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. 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The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving east of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. The pitch over same, 60 fms. west of Bryn Pica shaft, is 4 ft. wide, yielding 12 cwt.s. of lead ore per fm.—let to four men, at 9*t*. 10*s*. per fm.—the lode in the 10, driving west of Bryn Pica shaft, is 3 feet wide, yielding 10 cwt.s. of lead ore per fm.—let to four men, at 11*t*. 10*s*. per fm. 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NORTH MINERA.—M. Dunn, Jan. 20: The ground in Pugh's level is a little harder for driving than when last reported; there is some very fine spots of ore in the end. The end in Dunn's level is looking very kindly, with the ground a little easier for driving. The end in the bridge level is just the same as last reported. The end in Thomas's cross-cut is looking very well, and producing large stones of ore. We have completed the tramroad and air-pipes into a heavy run of ground in Thomas's level, but which I hope to get through in a few days.

NORTH WHEAL ROBERT.—J. Richards, Jan. 19: Murchison's Engine-Shaft: In the 62 west the lode is 3 ft. wide, containing quartz, muriac, flookan, and stones of ore. In the 62 west, on the north part of the lode, the lode is unproductive, and the driving is suspended, it being intended to prove this part of the lode by rises from the 62 below. In the 52 west, and west of Gorman's cross-cut, on the south part of the lode, the lode is 18 in. wide, composed principally of quartz and ore, worth $\frac{1}{2}$ ton per fathom. In the 52 west, and east of Brook's cross-cut, on the south part of the lode, the lode is 1 foot wide, and yields good stones of ore. In the 42 west, east of Carter's cross-cut, on south part of the lode, the lode is worth full 3 tons of ore per fathom. In the 42 west, and west of Gorman's cross-cut, on the north part of the lode, the lode is 3 ft. wide, and worth 2 tons of ore per fathom. In the 30 cross-cut north the ground is favourable for progress. In the 30 cross-cut south good progress is being made, and the ground continues easy for driving. The Trial shaft is down the required depth for a 52 fathoms level, and the shaft is set, together with the sinking of the shaft for a 42; the lode is 3 ft. wide, containing capel, muriac, quartz, and flookan, with occasional stones of ore.—Trial Shaft: In Gorman's winze, sinking below the 42 west, on the south part of the lode, the lode is divided by a slide; it is, however, again taking its regular course underneath, and is worth 2 tons of ore per fathom.—South Lode: In the 42 east, the lode at present only yields stones of ore, and the driving is suspended, to admit of some ground being stopped in the back thereof; and as soon as the stopping is sufficiently high to admit of a shaft being put in the drivage will be resumed. The lode in the stopes is worth 2 tons of ore per fathom. In the 42 west the lode is 18 in. wide, and contains good stones of ore; this drivage is also suspended for the same reason as above.

OLD TOLGIUS UNITED.—G. Reynolds, Jan. 19: The lode in the shaft sinking below the 42, is 16 in. wide, producing stones of ore and muriac, and the ground more favourable. The cross-cut in the 42 is being forced on without hindrance, and the ground is much the same as it has been. The south lode, going west in the 32, is worth 2 tons of copper ore per fathom; this lode, going east, is worth $\frac{1}{2}$ ton of copper ore per fathom; the stopes in back of this level are much the same as when last reported.

OLD WHEAL BASSET.—Jan. 18: The lode in the adit level, west of the new shaft, is 3 ft. wide, composed of spar and spar, but poor for copper ore; as the end is easy for driving we thought it was better to drive west another month before we cross-cut, as we recommended in our last report; this level is set to drive by two men and two boys, at 3*t*. per fm. There is little doing at present on tribute.

PEDMAN-DREAS UNITED.—Jan. 17: Since the last bi-monthly meeting the engine-shaft has been sunk 3 fms., 0 ft., 6 in., the lode is from 6 to 7 feet wide, producing low-price stamping work for tin. The shaft has been sunk 10 fms. 5 ft., 6 in. below the 90; we have suspended sinking for the present, and put the men to drive east and west in the 100 on the course of the lode; the end in each of the shaft is large, and of a very promising character. The 40 west, on engine lode, has been driven 1 fm. 5 in.; the lode is about 4 feet wide, producing saving work for tin. The 60 rise, west from engine-shaft, has been driven 4 fms., 4 ft. towards the old workers' deposit of tin, reported to be in the bottom of the 55. The 55 east, on the new lode, has been driven 1 fm. 2 ft. 10 in.; the lode is about 4 feet wide, and letting out a large quantity of water, though at present unproductive. Cobbler's shaft has been sunk 3 fms. 5 feet; lode producing low-price stamping work for tin. The 40 cross-cut, south from Bragg's shaft, has been driven 8 fms. 2 ft. 6 in.; we expect to intersect a lode shortly in driving in this direction, if the ground continues as favourable as at present. Though some of our tribute stopes in the upper levels are not yielding quite so much tin as formerly, there is every probability, by sinking the engine-shaft, and driving east and west in the 100 on the course of the lode, that we shall open up a good tribute ground that will last long. The mine is still in its infancy, and only just beginning to open out. We sold for the last two months 51 tons 4 cwt.s, 2 qrs. 24 lbs. of black tin for 35*l*. 16*s*. 8*d*.

PENHADEN CONSOLS.—Wm. Eddy, J. Cartwheel, Jan. 15: Since last setting-day we have extended the 94 north from shaft 18 ft.—10 ft. high; the lode is nearly all standing in the cast side. The lode is large, and where we have broken in we notice good stones of grey ore; we have set the men to take down all this lode before we extend north; this will be reported on next week. We have extended the 94 fm. level 14 feet 6 in. south from shaft; the lode in this end is poor. This level is 8 fms. south of shaft, and no granite, and as we are about to sink the shaft we have stopped this end. At the engine-shaft, below the 94, before we can sink we must cut the skip-road 18 feet; this work will take the shaftmen next week; after that is completed we intend to sink with nine men. The 94, north from the 90, winze, has been extended for the month 18 ft. 3 in.; we have a good lode of grey copper ore in this end, worth 2*t*. per fm. We have stopped stopping over the 92, south of No. 1 winze, and below the 70, north of No. 1 winze, until we get the ore to surface, as all the copper ore broken from these stopes for the last month is now underground. The stopes over the 78, north of No. 1 winze, are looking well; the lode of copper ore is 18 in. wide. The 70, north of No. 2 winze, is extended for the month 14 ft. 6 in.; the lode is large and kindly, mixed with copper ore, but not worth saving. In the tribute pitch below the 70, north and south of No. 2 winze, there is a good ore lode 3 feet wide. In the stopes over the 70, over No. 2 winze, the men have stopped 9 fms. 4 ft. 6 in., and have a good ore lode 2 ft. wide, and 4 fms. long. We have stopped stopping on tribute, and intend to set two new tribute pitches, at 6*s*. 8*d*. in 1*t*. We never saw the mine looking better than now.

PENHALDARVA.—T. Hodges, Jan. 19: At the engine-shaft we have cased and divided the shaft from the 20 to the 30, cut plat, put in penthouse, and resumed the sinking of the shaft yesterday. In the 30 we have cut into the lode about 9 feet, which is composed of spar, muriac, and good stones of lead—a promising lode. In the 20 south we have cut into the lode about 6 feet, which is unproductive; the rise in the back of this level is communicated with the winze, which has thrown good ventilation into this level. In the 20 north I have put the men to rise against Michell's winze, in order to ventilate this level; the present end is in tribute ground; stopes in the back of this level, north of Treasie's winze, will produce 7 cwt.s. of lead per fm.; stopes south of Treasie's winze will produce about 5 cwt.s. of lead per fm. Michell's winze, sinking below the 10 north, is suspended in consequence of foul air, being below this level 6 fms. 1 ft. 6 in. We sampled last Saturday a parcel of lead, computed 15 tons. I beg to remark that we have left out full 4 tons, which could not be dressed in time to sample.

POLBREEN.—Jan. 15: The ground at Dorcea's shaft is harder than when I wrote last, with more water, and the greatest part flowing from 3 fms. to 4 fms. from the bottom of the shaft, which makes very much against the sinking; but the shaft being down about 10 fathoms from the 32, we have put the men to drive north to cut into the lode, which we calculate is close at hand, in order to let down the water, after which we shall be able to sink a little more for a fork and a trip-plat. The 32 east is somewhat improved, but I can hardly call it paying ground yet; it is also better for the 32. The 32 west is also improved; it is yielding some good stones of tin, and is about 1 foot wide, almost all saving work, but not rich. There has not been any lode taken down in the 22 east for the past month; the end has been driven in killas, and having out several fms. from the end; as soon as the winze is holed we shall resume the driving at once, as we shall then have plenty of air for anything all through. There has not been any lode taken down in the back; we are uncovering it, as it is the better way of taking care of the tin. We have also three men stopping the back of the 32, west of the shaft, on tribute (2*t*. 1*s*. per fm.), on a good lode about 18 in. wide; we intend increasing the number of men in these stopes at our next setting-day; we expect plenty of tin from these stopes. We are getting on pretty well with the stamping; the water is keeping up very well. I hope by the time this season is over we shall have prepared some more efficient machinery for stamping the stuff. There are about 7 tons of tin cleaned, which we intend taking to Charlestown on Wednesday next, when no doubt but we shall get a good price for it.

PRIDEAUX WOOD.—F. Gill, F. Rich, Jan. 17: In the 64, driving east of Kendal's shaft, on Kendal's lode, the lode is small and unproductive. In the 54, driving east of Kendal's shaft, on the same lode, the lode is 2 ft. wide, producing a little tin, but not sufficient to value. In the 24 east the lode is small. In the adit driving east of Bawden's shaft, on Kendal's lode, the lode is 2 ft. wide, producing saving work for copper ore, and the ground easy for driving. In the 10, above the adit, driving east of Bawden's shaft, on Kendal's lode, the lode is 1 ft. wide, producing saving work for copper ore. In No. 2 stop, west of No. 3 rise, the lode is 18 in. wide—solid blonde. In No. 2 stop, west of No. 3 rise, the lode is 3 ft. to 4 ft. wide—2 ft. of solid blonde. In No. 2 stop, west of No. 3 rise, the lode is 18 in. wide—solid blonde. There is no alteration in any other part of the mine.

REDMOOR.—T. Taylor, Jan. 18: In the 80 east, on Kelly Bray lode, we have intersected a sparry cross-course about 2 ft. wide, which has the lode; we are now driving to find the heave. This cross-course at the 70 is about 4 fathoms west of the great cross-course. In the 80 west the ground is more favourable for driving, and the lode a little larger, containing spots of yellow copper ore. The winze in the bottom of the 80 is yielding about 1 ton of copper ore per fathom.

RHEIDOL.—Capt. Teague, Andrews, and Cock, Jan. 18: Highbridge lode in the 173 fm. level, driving east of Martin's east shaft, is 3 ft. wide, worth for the 20, per fm. In the 173, driving west of Martin's east shaft, the lode is 3 feet wide, worth for the 12*t*. per fathom. In the 162, driving east of shaft, the lode is 3 ft. wide, worth for tin and copper 16*t*. per fathom. In the 152, driving east of shaft, the lode is 3 feet wide, worth for tin and copper 18*t*. per fm. We have not taken down the lode in the old sump-shaft since last reported. In the 162, driving west of old sump-shaft, the lode is 2*t*. 6*s*. wide, worth for tin 10*t*. per fathom.—Chapple's Lode: In the 120, west of Downright shaft, the lode is 2 feet wide, worth for copper ore 12*t*. per fathom. There is no alteration in North Tinctorf since last reported. The stopes and pitches throughout the mine continue to yield fair quantities of mineral.

TOLCARNE.—Jan. 15: Field's shaft was set yesterday to cut down by nine men, at 11*t*. per fm.; the ground cut last month was 2 fms. 1 ft. 10 in. The adit end to drive west on Field's lode by four men, at 6*t*. 6*s*. per fm.; the lode in this end is 10 in. wide, and is worth for copper ore from 10*t*. to 12*t*. per fm., and is not looking quite as good as when last reported.

TRELYON CONSOLS.—G. Higgs, Jan. 19: The lode in the 20 west was taken down yesterday, and is now valued at 40*t*. per fm. for tin.

TREWEATHA.—T. Richards, W. Rowe, J. Cartwheel, Jan. 19: The 90 end north is worth 3*t*. per fm.; the same level south is without change. In the 50 north no lode has been taken down since last reported. The stopes are turning out much the same as for some time.

VALE OF TOWY.—Thos. Harvey, S. Harper, Jan. 18: The lode in the 70, north of Clay's engine-shaft, is 3 ft. wide, composed of gossan and spar, with a small quantity of lead, but not to value. The lode in this level south is 2*t*. 6*s*. wide, as last reported, producing saving work. There is no change in the 60, north of this shaft. The lode in the 60, against Field's shaft, is 4 ft. wide, producing 8 cwt.s. of lead per fm. The lode at Field's shaft, sinking below the 50, south of this shaft, is 3 ft. wide, worth for tin and copper 18*t*. per fm. The lode in the stopes in back of the 50, south of this shaft, is 3 ft. wide, producing 10 cwt.s. of lead per fm. The lode in the 40, south of said shaft, is 1 ft. wide, producing a little lead, but not to value. The lode in the 60, north of Bonville's shaft, is 3*t*. 6*s*. wide, as last reported, producing from 16 to 17 cwt.s. of lead per fm.; the same may be said of the south, producing from 16 to 17 cwt.s. of lead per fm. We hope to get the skip-road to this level by the end of the week. No change in the 50, north of this shaft. The lode in No. 2 winze, sinking below the 40, north of said shaft, is 3 ft. wide, producing full 1 ton of lead per fm. No change in any other part of the mine.

WEST ALFRED CONSOLS.—S. Lean, R. Steven, Jan. 18: The lode in the 85 west of flat-rod shaft, is 4 ft. wide, and assumes a more promising appearance for ore than for several months past; the north part of it, for about 1 ft. wide, is ore throughout, with a prospect of further improvement. The lode in the 65 west is also looking a great deal more promising for copper, and the ground more favourable, and as we are getting under the ore gone down in the level above we anticipate something very good here shortly; we have a good lode of ore in the back of this level, east of No. 6 winze. The lode in the 55, west of the last-mentioned winze, is worth 2*t*. per fm.; the stopes in the back of this level have been desuing the lode in the past month, they will now commence to take it down. The ground in the 65 cross-cut north has been very troublesome for driving; we hope we have got through the worst of it.

WEST HILL.—R. Waters: The ground in the 62, driving north and south of new engine-shaft, is as last reported. In the 52, driving north of engine-shaft, we are getting near the slate, consequently the ground is a little more favourable for driving. In the 42, driving south of Jones's winze, in this level, there has been but little done since last reporting, owing to the level being so full of stuff coming from the stopes above; we are present drawing it to surface with all speed. The lode in the stopes in back of the 52, south of Jones's winze, will yield 35 cwt.s. per fathom. The lode in the stopes north of new engine-shaft, will yield an average 1 ton of ore per fathom. In the 30, south of new engine, the men from the 52 are at present driving on a branch 4 ft. wide, worth 6 cwt.s. of ore per fathom. The tribute pitches are without alteration. The dressing operations are being carried out with speed.

ROSEWALL HILL AND RANSOM UNITED.—P. Roach, Jan. 19: Ransom: The lode in the 80, west of the Ransom engine-shaft, is worth 6*t*. to 8*t*. per fathom. The lode in the 40, east of the whin-shaft, is worth 7*t*. per fathom. The 50, east of same shaft, is poor. The 60, east of ditto, is worth 20*t*. to 25*t*. per fathom. The 70, east of ditto, has yielded some rich work, but is not now so good. We shall be in a position to drive the 80 in the same direction in a day or two, the dip of tin being east. The 70 and 80 are not quite far enough advanced to reach the tin ground under the 60. No lode has yet been cut in the 30 north, on the tram. This section of the mines may now be said to be almost in a regular course of working, with the exception of the sinking of the engine-shaft, which we think should not be done ere a communication is effected with the engine-shaft in the 80; and in order to expedite the discharge of stuff, and enable a more vigorous working, we are now busily engaged in getting another kibble to draw from this part of the mines.—Rosewall Hill: We have still whole ground in the 80, east of the engine-shaft; lode 1 ft. wide, say but not rich. We are making pretty good progress in going down, having cleared up 2 fathoms of the engine-shaft below 100 since last report. We hope to set the 100 to clear east of the said shaft tomorrow; it in this level we expect to find the carbons (about 40 fathoms east of the shaft) which yielded so immensely to the former workers, and it is said to be the

first one that was met with in the neighbourhood, now about 55 years ago, but which was worked at one level only, its nature being the same and richness equal to those that have been since cut in the adjoining mines—the St. Ives Consols and the Providence Mines, and which are now causing such sensation in the locality, upwards of 800*t*. worth of tin having been broken (and just sold) from one in the former by two men and two boys in a week; and the latter I am told are now about to sell 40 tons of tin ore, the produce of a month, and nearly all from one or two similar deposits. As we are now raising a pretty large quantity of tin-stuff (although, comparatively speaking, but little whole ground has been met with), we purpose getting our tin floors in readiness with all possible speed. Our new plunger-lift in the 100 works well.

SORTIDOE CONSOLS.—J. Richards, Jan. 20: In the 86 west of Hitchin's engine-shaft, the lode is becoming larger; it is from 4 to 5 ft. wide, and promising, being composed of capel, quartz, muriac, and fine stones of ore. No other alteration.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 15: The cross-course in the 62 cross-cut north is much harder than I expected to find it before we commenced driving on it, consequently our progress in that direction is likely to be slower than I anticipated from the nature of the ground on No. 3, east in this level; it was found necessary to enlarge the end, so that but little has been done on the lode. The shaftmen are getting on as fast as possible.

SOUTH CARN BREA.—T. Glanvill, Jan. 18: There is no alteration this week.

SOUTH CLIFFORD UNITED.—The engine-house and stack are complete, and the engine is being lifted in, and it is expected to be ready for work in a month.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—William Roberts, Jan. 18: Nothing new since last reported.

SOUTH LADY BERTHA.—Wm. Goss, R. Unsworth, Jan. 20: In the 40, driving south on the cross-course, the ground is very easy for exploring, being composed of fluor spar, sulphuric muriac, flookan, and small spots and strings of lead ore. As we get off from the east and west lodes I have no hesitation in saying this north and south course will become productive of silver-lead ores. In the rise in the back of the 40 the men are taking down the lode, which is producing good work for copper ore, and the men are making good progress. We have commenced to clear the 30 so as to sink against the rise coming up from the 40; this being done the mine will be well ventilated, and these tributaries will at once go to work in the 40. In the winze sinking below the adit the lode is from 3*t*. to 4 feet wide, with two well-defined walls, and producing good stones of rich ore, with a quantity of muriac, but the copper ore is not enough to save. We are dressing, and shall sample at the end of this week. The drawing-machine works well, and in ten hours 150 kilos of stope can be drawn. All other things on the mine are progressing satisfactorily.

SOUTH PENHALDARVA.—Thos. Hodge, Jan. 19: The engine-shaft is below the 29 about 2 fms., in a beautiful light blue killas. In the 29, driving north on the east part of the lode, it is 9 in. wide, composed of soft spar, prawn, muriac, and good stones of lead, looking promising for further improvement. We calculate we have about 18 fms. more to drive to reach the junction of lodes, and by present appearances we may reasonably expect some good results soon.

SOUTH PHENIX.—James Barkell, Jan. 13: Since your last general meeting, on Nov. 24, the engine-shaft has been sunk about 2 fms. 4 ft., making it about 8 fms. 4 ft. below the 142. This has been accomplished in a little over four months; but the shaft being a little harder our progress at present is not quite so good. The ground in the 142 is more congenial for ore than I have yet seen it, there being more peach mixed up with the granite, and occasional strings and branches passing through it, producing spots and stones of rich yellow ore. The branches are nearly perpendicular, and appear as if they were dropping into some lode to the north of the shaft. The 142 cross-cut has been driven towards Greenhill's lode about 2 fms., making it altogether about 13 fms. from the shaft; and there remains to be driven a little over 4 fathoms to intersect the lode. The ground in the end is not so hard as we have had it, and there is a little water oozing through it, which causes me to think we are near another branch. I would advise that the cross-cut be pushed on with all possible speed, as we have a threefold object in doing it. First, to ascertain whether the great Trelawny lode will form a junction with Greenhill's lode at this level, which it will do if it continues the same unbroken as it was from the 110 to the 126 fathom. Secondly, to intersect Greenhill's lode, when we may reasonably expect to find producing ore in remunerative quantities, seeing the lode was so kindly in the level above; and, thirdly, to make a communication with the winze that is partly sunk from the 126, in order to cause a circulation of air. In conclusion, I beg to say that I think in a few months more we shall be in a much better position, seeing that the engine-shaft will be down 32 fathoms deeper than we have yet seen the lodes; and the ground in the shaft having changed for the better, it is my firm opinion that the lodes will also improve, and be productive at that level.

SOUTH WHEAL TOLGIUS.—Jan. 15: Youren's Lode: At Michell's engine-shaft, sinking below the 110 east, the lode is 2 ft. wide, producing occasional stones of ore, but not to value. In the 110 east the lode is 10 in. wide, producing stones of ore, but not looking so well as when last reported on. In the 110 west, on the caunter, the lode is 8 in. wide, yielding $\frac{1}{2}$ ton of ore per fathom. In the 110, west from Michell's, driving east on the caunter, the lode is 1 ft. wide—poor. The two stopes in the back of the 110, west from Michell's, are yielding

this level has passed through 15 fms. of ore ground; the bottom of the level will produce 2 tons of copper ore per fathom. In the 30, east of boundary, lode 1 foot wide, producing stones of ore; in this level the water is nearly 1 foot high, which will shortly prevent further progress. I should then purpose putting the men to sink a winze below the 30, on the canister lode, which I have no doubt will open some tribute ground. The trial department is as last reported.

WHEAL TRELAWNY.—W. Bryant, W. Jenkin, T. Grenfell, Jan. 20: Smith's engine-shaft is sunk 2 fms., 4 ft. under the 152; we have intersected the lode in this level, and have taken some good stones of lead ore out of it, and hope to give you its value in our next report. The winze sinking under the 142 is down 7 fms., the lode in which is 4 ft. wide, worth 15*s.* per fathom. The lode in the 142, north of the shaft, is 2 ft. wide, worth 1*s.* per fathom; in the same level south we are anticipating an improvement shortly, as we have an increase of water issuing from the present end. In the 132, north of Chippindale's shaft, the lode is 3 ft. wide, worth 8*s.* per fm.; the lode in the winze sinking under this level is 3 ft. wide, worth 12*s.* per fm.; in the 120, north of Chippindale's shaft, it is 2 ft. wide, worth 10*s.* per fm.—South Mine: Trelawny's shaftmen have resumed cutting the plat at the 152. The lode in the 142, south of the shaft, is 3 feet wide, worth 9*s.* per fm.; in the 130 south, it is 3 ft. wide, worth 8*s.* per fm.; in the 107 north, it is 3 ft. wide, worth 6*s.* per fm. The stopes and pitches are producing much as usual. We sampled on Saturday last 20 tons, computed, of best quality lead ore, for sale on the 22d instant.

WHEAL UNION.—T. Glanville, Jan. 18: In the 30, driving east of the cross-course, the north lode is 5 ft. wide, mixed with yellow and grey copper ore. In the same level, west of the cross-course, the lode is 2*1/2* feet wide, mixed with copper ore. We sold on Saturday tin ores to the amount of 117*s.* 1*d.*

WHEAL WREY CONSOLS.—W. Hancock, E. Roskilly, P. Clymo, Jan. 20: The engine-shaft is sunk 11 fms., 4 ft. under the 74. The lode in the 74 north is 2*1/2* ft. wide, producing 6 cwt.s. of lead per fm.; in the 64 north it is 2 ft. wide, producing 8 cwt.s. of lead per fm.; in the same level south it is 2 ft. wide, producing 4 cwt.s. of lead per fm.; the same level south is suspended, being home to the slide; in the 44 north it is 1 ft. wide, producing occasionally stones of lead. The pitches are producing much as usual. We shall sample to-morrow a parcel of lead ore, computed 42 tons.

WILLOW BANK.—W. Paul, Jan. 17: The engine-shaft is now down 10 fms. below the 30 fm. level. We have got another fathom to sink before we commence to drive to have 10, 15 fms. of backs. The lode in the bottom is still about 4 ft. wide, strongly impregnated with copper ore throughout. In the 30 fm. level, east of shaft, the lode is large, producing stones of ore at times. The cross-cut driving south in the 30 fm. level, 2 fms. west of shaft, is driven 4 fms., 5 ft. 6 in.: the ground still continues the same, but during the last few days there is a little water coming from the forepart, so that I hope to cut the lode shortly. Saturday last being our setting-day, the following bargains were set:—The 30 to drive east by six men, at 9*s.* per fm. The cross-cut to drive south by two men, at 7*s.* 10*d.* per fm. The shaftmen will go on as before. I am sorry to say that unless we get some rain very shortly our ponds will be dry.

WREY CONSOLS.—J. Williams, Jan. 20: The lode in the level driving west is improving, and is now impregnated with jack and copper; occasionally we break some very good stones of copper ore, and more water is coming out of the lode.

YEAR.—N. Faull, Jan. 19: At present we have a floor of capels in the bottom of the engine-shaft, very hard, which is at present impeding our progress in sinking, we are now down in the sixth fathom. The western end is a little better, and likely to improve. The eastern end is improving to a very kindly end, letting out a quantity of water. The cross-cut north is still intersecting branches with good stones of ore, and the water still very strong in the breast of the end. The stopes in the back of the 20 are looking well, and yielding 5 tons per fm. The winze in the bottom of the 10 is improving, producing some very good work. We sent away about 75 tons of ore, and have 3 or 4 tons more on the floors; by Saturday we hope to have down on the floors, and ready for the crusher, about 90 tons.

ZEAL MANOR.—R. Barkell, Jan. 20: We have put up a rise during the past week from the back of adit to surface; we holed it on Tuesday. The air is now very good; the rise was 5 fms. through. We commenced to rise at the north of the last lode we cut, which is the one that is producing ore at Ramsey Hill. We can now see that it is in a direct line with the engine-shaft. The lode in each end is looking well, but it is too shallow to have much copper. I have not seen the lode looking better than it is at the north end; it is a first-rate looking lode.

THE PROPOSED TESTIMONIAL TO MR. J. Y. WATSON, F.G.S.
A suggestion having been made in the *Mining Journal* of last week that some acknowledgment was due to Mr. Watson, for his able advocacy of the interests of British Mining during a period of nearly 20 years, the following gentlemen have formed themselves into a committee to arrange for the presentation to him of a suitable Testimonial:—

P. E. BLAKEWAY, Esq., Director of C. HANCOCK, Esq.
Devon Great Consols. JEHU HITCHINS, Esq.
W. D. BOASE, Esq. R. MIDDLETON, Esq.
HYDE CLARKE, Esq., D.C.L. J. H. MURCHISON, Esq., F.G.S.
S. W. DAUKES, Esq. T. TAPPING, Esq.
W. J. DUNSFORD, Esq.

TREASURERS:
R. MIDDLETON, Esq., 26, Fleet-street. CHAS. HANCOCK, Esq., 20, Tokenhouse-yard.

Communications from gentlemen desirous of co-operating with the committee to be addressed to J. H. Murchison, Esq., 117, Bishopsgate-street; and subscriptions, limited to 1*s.*, may be addressed to the Treasurers, which will be duly acknowledged in the *Mining Journal*.

GOVERNMENT MINE INSPECTION.—We understand there is to be a meeting of the Inspectors at Harrogate, to consider the necessity of a revision of the Act. It is believed there is, as usual, great differences of opinion among them, and that little good is likely to result from their deliberations.

THE AMERICAN IRON INTEREST.—A private meeting of the leading ironmasters of Pennsylvania was held on Monday, Jan. 3, at the rooms of the United States Ironmasters' Association, in Philadelphia, for the purpose of consulting upon the prospects of the iron interests in this country, and initiating a programme for a consolidated movement of that interest throughout the United States. The meeting was select in its character, and many of the leading men in the trade were present. We understand that the iron interest will be satisfied with a specific import duty of \$6 per ton on pig-iron, \$13 on rails, and \$15 per ton on bars. These figures we deem to be fair, and such as will very considerably ameliorate the condition of our iron manufacturers.—*U. S. Mining Journal*, Jan. 8.

NEW ROPES FOR MINES.—Our attention has been drawn to some tests of a patent rope, manufactured by Messrs. J. and E. Wright, of London and Birmingham. The tests took place at Mitcheson's hydraulic testing machine, and were witnessed by a number of practical and scientific gentlemen, amongst them Capt. Harrison, of the *Great Eastern*, and Capt. Kell, of the Atlantic Telegraph Company; and, from the very satisfactory manner in which it bore the tests applied to it, appears likely to come into general use. The invention consists in making a rope of hemp and wire combined, which gives even greater strength than wire rope, with the pliability of the hemp rope. It is manufactured by placing a single wire inside every rope yarn, securely coating each wire with hemp, and separating each hard substance, making a sort of cushion for each wire to bed upon, so that when any heavy strain is applied the wires do not cut each other, as in all wire rope. Its superiority over hemp rope for mining purposes is its taking the same breaking strain at less than half the weight of hemp rope; and, compared with chain, at less than one-quarter the weight of ordinary chain. The subjoined will show more readily the superiority of the new rope:—

Size of new wire and hemp rope, tarred.	Weight per fm.,	Breaking strain of wire rope at same weight as hemp rope.	Breaking strain of hemp rope at same weight as same weight per fm., ungalvanised.
5 in.	10 <i>1/2</i> lbs.	21 tons 0 cwt.s.	15 tons 6 cwt.s.
4 <i>1/2</i>	8 <i>1/2</i>	19 10	13 10
4	7	15 10	10 15
3 <i>1/2</i>	5 <i>1/2</i>	12 5	7 8
3 <i>1/2</i>	4 <i>1/2</i>	10 0	7 0
2 <i>1/2</i>	2 <i>1/2</i>	8 0	3 5
2	1 <i>1/2</i>	4 0	2 0

Compared with wire rope, hemp rope, and chain, each to take the same breaking strain, it will stand thus:—

Each to take Breaking strain of 21 tons 0 cwt.s.	Weight per fm.	Weight per fm.	Weight per fm.	Weight per fm.
19 10	10 <i>1/2</i> lbs.	15 <i>1/2</i> lbs.	21 lbs.	59 lbs.
15 10	8 <i>1/2</i>	13 <i>1/2</i>	19	54
12 5	7	10 <i>1/2</i>	14	41
10 0	4 <i>1/2</i>	7 <i>1/2</i>	12 <i>1/2</i>	32
8 0	2 <i>1/2</i>	5 <i>1/2</i>	10 <i>1/2</i>	25
4 0	1 <i>1/2</i>	3	8	20

This new rope has been in use at the London, East and West India, and Victoria Docks, in hauling vessels in and out of the locks, and the manner in which it has borne this severe practical test has given the greatest satisfaction. It is also used by shipping, for all sorts of standing rigging and towing hawsers. Its advantages for mining purposes are great, particularly for long capstan-ropes, being such a considerable saving of weight.

PRESERVATION OF BUILDING STONE.—In our last Journal we referred to Mr. Ransome's invention for silicising building stone, and purpose now adding a few additional particulars. We have said that the materials used are silicate of soda and chloride of calcium. Flint, or silice, is soluble by heat under pressure in a solution of caustic soda; in this form it is called soluble silicate of soda, and cannot be again dissolved without a repetition of the above treatment. The application of the silicate was no novelty, but a great obstacle remained for Mr. Ransome to overcome. The protecting power of silicates was well known, but it was equally well known that they were so easily acted upon by moisture that to ensure the durability of the stone treated it was necessary continually to repeat the process, and this difficulty has been met by Mr. Ransome availing himself of his knowledge of chemistry to secure the production of an insoluble silicate of lime, so impregnated into the stone as almost to become a part of the stone itself.

Mr. Hart, the gas patentee, of Fleet-street, has offered a prize of 50*s.* for the best essay on his new gas-burner.

Mr. David Partridge, assistant chief engineer of the steam factory department at Woolwich, after a series of experiments, has invented an improved description of smoke-consuming apparatus, which is ordered to be applied to steam-vessels in the Royal Navy.

STATISTICS OF THE MINING INTEREST.—Mr. W. H. Cuell's Annual Tabular Statement, with Returns of Metals, on Dividend-paying Cornish, Devonshire, Welsh, and Irish Mines, for the year 1858, will appear in our next Journal.

* * * The INDEX and TITLE-PAGE to Volume XXVIII. of the MINING JOURNAL will be published as a SUPPLEMENT next week.

* * * Now Ready, price One Shilling, THE PROGRESS OF MINING IN 1858. By J. Y. WATSON, F.G.S., being the Fifteenth Annual Review. To be had at the *Mining Journal* office, 26, Fleet-street; of Messrs. Watson and Cuell, St. Michael's-alley, Cornhill; or through any book-seller or newsman in town or country.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Jan. 21, 1859.

COPPER	£ s. d.	SHEETS	Per lb.
.....p. lb. 0 1 1—		10 <i>1/2</i> —11 <i>1/2</i>	
ditto tubes	0 1 2 <i>1/2</i> —0 1 3 <i>1/2</i>	10 <i>1/2</i> —	
Sheathing & bolts	0 1 0 <i>1/2</i> —	13 <i>1/2</i> —	
Bottoms	0 1 0 <i>1/2</i> —0 1 1 <i>1/2</i>		

OLD (Exchange) 0 0 11—

Best selected, p. ton 11*1/2* 10 0—

Tough cake, 11*1/2* 10 0—

Tile, 11*1/2* 10 0—

South American, 10*1/2* 0 16*1/2* 0 0

IRON. Per Ton.

Bars, Welsh, in London, 7 5 0—

Ditto, to arrive, 6 17 6—7 0 0

Old rods, 7 10 0—

Stafford, in London, 8 0 9—9 0 0

Hoops, 8 0 9—9 0 0

Sheets, single, 9 10 0—10 10 0

Pig, No. 1, in Wales, 3 15 0—4 15 0

Refined metal, ditto, 4 10 0—5 5 0

Bars, common, ditto, 6 5 0—6 10 0

Ditto, railway ditto, 6 10 0—

Ditto, Swed. in London, 13 0 0—16 0 0

In stock to arrive,

IC Charcoal, 1st qua. p. bx. 1 12 0—1 13 0

IC Ditto 1st quality, 1 13 0—1 15 0

IC Ditto 2nd quality, 1 10 0—1 11 0

IC Ditto 2d quality, 1 18 0—1 17 0

Staffordshire Forge Pig. 4 10 0—5 0 0

Welsh Forge Pig, 3 0 0—3 5 0

LEAD. Per Ton.

English Pig, 22 15 0—23 0 0

Ditto sheet, 23 5 0—23 19 0

Ditto red lead, 24 6 0—

Ditto white, 30 0—

Ditto patent shot, 26 10 0—

Spanish, 22 5 0—22 10 0

American, none

* At the works, 1*s.* to 1*s.* 6*d.* per box less.

REMARKS.—Prices of metals have not undergone any alteration, there has not, however, been quite such a good enquiry, and the market consequently closes easy.

COPPER.—Since the advance orders have been scarce, especially for manufactured kinds for shipment. Best select is still in request, but smelters mostly refuse

attack a whole body of *unopposing* shareholders, and in a few days run them to some hundreds of pounds costs, a great blow and discouragement will be given to mining enterprise; and the manner in which the Old Toltus shareholders are able to resist these costs—for we presume that the proceeding having been all on one side has now ceased—will be watched anxiously by one and all.

It is much to be regretted that party feeling should ever be permitted to interfere with the management of a mine, or that the interests of the shareholders, as a body, should be jeopardised to further those of individuals. On Dec. 23 a meeting was held in the county, and resolutions passed for removing the seat of management from London to the mine. Upon this the London holders took immediate steps to convene a special meeting, in order that objectionable portions of the resolutions might be rescinded. In the course of a few days the signatures of the holders of 10,018 of the 20,000 were obtained; and at the special meeting, on Monday, every disagreement was cleared up, and in accordance with the wishes of the majority of the adventurers, who reside in London, the financial affairs of the adventure will henceforth be entrusted to a committee of management, and the books and papers of the company will be lodged in a London office—that of Mr. Edward King, who enjoys a high reputation for ability and integrity, which will certainly facilitate the transfer of shares in the London market. The sampling of 399 tons of copper ore, estimated to be worth 2000*l.*, and 30 tons of black tin, which will realise another 200*l.*, making the returns for November and December 4000*l.*, against a total cost of 3500*l.*, is a satisfactory test of the property, and it is believed that, under proper management, St. Day United Mines will soon be entitled to be restored to its position amongst the dividend-paying mines.

In the COAL MARKET, during the past week, there has been but a limited amount of business doing, the demand for every description of coal being very trifling. On Monday, there were only 71 ships at market, 32 of which were sold, the prices being—Best Wallsend, 18*s.* to 19*s.* 6*d.*; second quality, 17*s.* 6*d.* to 18*s.*; manufacturers' 15*s.* to 15*s.* 6*d.*; Hartley's, 14*s.* 6*d.* to 15*s.* 3*d.*. On Wednesday there were 47 ships at market, and only 18 sold. Yesterday house qualities were a little more in demand, at a slight reduction from previous rates, and the closing quotations were—Best Wallsend, 18*s.* to 18*s.* 6*d.*; second quality, 17*s.* 6*d.*; Hartley's, 15*s.*, and steam, 21*s.*

At Truro Ticketing, on Thursday, 4428 tons of ore were sold, realising 25*l.* 10*s.* 1*d.* 6*d.* The particulars of the sale were—Average standard, 14*s.* 10*s.*; average produce, 5*s.*; average price per ton, 5*s.* 15*s.* 6*d.*; quantity of fine copper, 257 tons 10*cwt.* The following are the particulars:

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 23	4421	15 12 6	5	£139 12	6
30	3015	18 7	6%	£13 13	0
Jan. 6	3559	15 8 0	7%	6	96 6
" 13	3862	14 12	6	2 0	100 15
" 20	4428	14 10	5%	5 15 6	99 4

Compared with last week's sale, the advance has been in the standard 9*s.*, and in the price per ton of ore about 7*d.* Compared with the corresponding sale of last month, the advance has been in the standard 6*s.* 9*s.*, and in the price per ton of ore about 8*s.*

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 716*s.* 7*d.* being 7*s.* per share, arising from profits on sales of copper ore sampled in the months of Sept., and Oct. last.

After payment of the same there remains in hand a balance of 19,477*l.* 11*s.* 9*d.* in cash and ore bills not at maturity, applicable to the general purposes of the company.

Wheal Buller, on Tuesday, declared a dividend of 768*l.* (3*s.* per share).

The Wicklow Copper Mine Company, at the meeting on Thursday, declared a dividend of 3*s.* per share. The account for six months, ending Sept., showed—Amount received for sales of precipitate and copper pyrites, 21,291*l.* 4*s.* 11*d.*; less charges of half-year, 12,843*l.* 16*s.* 9*d.*: showing a balance of net profit of 8447*l.* 8*s.* 2*d.* The ores raised were—pyrites, 17,003 tons; coppery pyrites, 1500 tons; precipitate, 4 tons=18,507 tons. The shafts, levels, pit-work, and machinery are in substantial good order. During the half-year a new boiler has been put in to the 29-in. steam-whim, and new nozzles to the 50-inch pumping-engine, which, with some additions of a minor nature, add to the efficiency of the general plant; and all the operations are proceeding with vigorous and proportionate advantages.

At Craddock Moor Mine meeting, on Jan. 12, the accounts for Sept. and Oct. last showed—Balance last audit, 690*l.* 15*s.* 3*d.*; ore sold, 1763*l.* 10*s.* 5*d.*=2462*l.* 5*s.* 8*d.*: Labour cost, 1028*l.* 13*s.* 7*d.*; merchants' bills, 343*l.* 3*s.* 6*d.*; lords' dues, 110*l.* 10*s.* 6*d.*: leaving credit balance of 979*l.* 18*s.* 1*d.* A dividend of 5*s.* per share was declared. Capts. H. Taylor and J. Taylor reported that the 72 west, on Verco's lode, was worth 2 tons per fm.; the 72 east, 1 ton; the 62 west, $\frac{1}{2}$ ton. The winze below the 62 was worth 1 ton, and the stopes in the bottom of the 62, east of eastern cross-course, $\frac{1}{2}$ ton. The 72 west, on Vivian's lode, was worth 1 ton; the 62 west, $\frac{1}{2}$ tons; the 42 west, 2 tons; the stopes in the back of the 62, $\frac{1}{2}$ ton, and the lode in the winze in the bottom of the 52, $\frac{1}{2}$ ton per fathom. The next sale will be about 212 tons of good quality copper ore.

At Pend-an-drea United Mines bi-monthly meeting, on Wednesday, the accounts showed—Balance last audit, 1255*l.* 1*s.* 11*d.*; for black tin, 3543*l.* 16*s.* 6*d.*; copper ore, 641*l.* 8*s.*; calls, 684*l.* 14*s.* 7*d.*; discount, 55*l.* 10*s.* 2*d.*=4037*l.* 11*s.* 1*d.* By paid labour cost, Oct., 1065*l.* 18*s.* 1*d.*; Nov., 1159*l.* 12*s.* 8*d.*; sundries merchants, 929*l.* 10*s.* 2*d.*; lords' dues, 76*l.* 0*s.* 1*d.*; auditors, 6*l.* 11*s.* 3*d.*; secretary, &c., two months, 24*l.* 12*s.* 2*d.*: leaving cash at the Commercial Bank, 189*l.* 6*s.* 4*d.*, and tin bills at Redruth to pay Del. labour cost, due on Friday, 1494*l.* 19*s.* 1*d.* The agent's report will be found among the British Mines.

At Gomamena Mine meeting, on Jan. 12, the accounts for Sept. and Oct. showed—Balance last audit, 137*l.* 18*s.* 3*d.*; ore sold, 869*l.* 7*s.* 10*d.*=1097*l.* 6*s.* 1*d.*: Labour cost, 621*l.* 10*s.* 10*d.*; lord's dues, 54*l.* 18*s.* 6*d.*; materials, &c., 18*l.* 1*s.* 11*d.*: leaving a credit balance of 146*l.* 5*s.* 7*d.* Capts. R. Pascoe and W. George, jun., report that the lode in the 80 east (Sarah's lode) has averaged 8 tons of ore per fm. in the last 10 mds. drive. They have holed the winze from the 70 to the 80, which has opened some good tribute ground. The lode in the 58 has not proved so productive as was anticipated, although they have driven through several fathoms of profitable ground. The 38, on Gilpin's lode, has been disordered, but still produces a little ore. They sampled on Monday (computed) 100 tons of ore.

At New Crow Hill meeting, on Wednesday, the accounts showed calls received on 2149 shares, amounting to 268*l.* 12*s.* 6*d.*; the same were absolutely forfeited, and at the conclusion it was agreed that the secretary be instructed to re-enter the present shareholders' names in the books of the company, provided the calls be paid on or before Feb. 15; and instructions were ordered to be sent to the captain to sink a winze below the 55, and to leave the sinking perpendicularly at present, when it was determined to prosecute the workings vigorously.

At Great Wheal Alfred general meeting, yesterday (Mr. Thos. Field in the chair), the statement of accounts, showing a balance in favour of mine of 149*l.* 7*s.* 1*d.* was read, received, and passed.—[The agents' report appears among the British Mines.]

At Wheal Uny meeting, on Tuesday (Mr. P. L. Hinds in the chair), the accounts showed—Balance last audit, 147*l.* 8*s.* 7*d.*; mine cost, Sept., Oct., and Nov., 1669*l.* 10*s.*; merchants' bills, 695*l.* 13*s.*; lord's dues, 131*l.* 14*s.* 5*d.*; sundries, 42*l.* 18*s.* 1*d.*=2657*l.* 7*s.* 1*d.*: Ores sold, 2379*l.* 19*s.* 5*d.*; calls paid, 125*l.*: leaving balance against the mine, 179*l.* 17*s.* 6*d.* A call of 2*s.* 6*d.* per share was made. A report from Capt. Rose, of a very satisfactory character, was read. The committee were elected for the next three months, and a vote of thanks to them for their past services having been passed, the meeting separated.

At the St. Day United Mines meeting, on Monday (Mr. J. Balster in the chair), the appointment of Messrs. Williams, J. Balster, E. Boyle, R. R. Broad, and Hallett (the latter in the room of Mr. F. Pryor, resigned), was confirmed; and certain portions of resolutions passed on December 23 were rescinded. The office of auditors was dispensed with, with the best thanks of the meeting to Messrs. Broad and Norcom for past services. Full details of the proceedings will be found in another column.

The Carnarvon Vean and Wheal Francis accounts, as reported by Mr. Edsall, show a debit balance of 121*l.* 12*s.* 2*d.* The accounts brought up to Sept. 30 showed a general correctness.

At Wheal Trebarwith meeting, on Wednesday (Mr. George Staveley in the chair), the accounts showed—Balance last audit, 716*l.* 9*s.* 7*d.*; mine cost, merchants' bills, and sundries, June, 23*l.* 0*s.* 11*d.*; July, 15*l.* 0*s.* 11*d.*; August, 256*l.* 17*s.* 3*d.*; Sept., 324*l.* 17*s.* 9*d.*; October, 309*l.* 10*s.* 1*d.*; November, 356*l.* 9*s.* 6*d.*; coal and freight, 112*l.* 6*s.* 11*d.*; sundries, 39*l.* 3*s.* 1*d.*=2513*l.* 15*s.* 10*d.*: Calls received, 1024*l.*; copper ore sold, 823*l.* 16*s.* 11*d.*; tin ore sold, 105*l.* 15*s.* 6*d.*: leaving balance against the mine, 65*l.* 3*s.* 10*d.* A call of 12*s.* 6*d.* per share was made. Capts. Gundry and Hosking reported favourably upon the mine. They recommended the old engine-shaft to be cleared up, divided, and secured, as the best and most effectual course to open all the old mine, which is likely to be a great help to them at the present standard for copper. When the mine comes into working the standard for copper was only about 80*s.* per ton. They have about 45 tons of ore towards the next sampling.

At the North Wheal Wrey meeting, on Monday, the accounts showed a balance, with arrears of call on the nine months' working of 947*l.* 0*s.* 7*d.*; to liquidate which, and to pay off liabilities, a call of 10*s.* per share was made.

At the Devon Wheal Buller Mine meeting, on Jan. 15, (Mr. G. F. Buller in the chair) the accounts showed—Balance last audit, 52*l.* 5*s.*; ores sold, 21*l.* 14*s.* 5*d.*; carriage received, 17*l.* 8*s.*; calls, 483*l.* 19*s.* 7*d.*=765*l.* 6*s.* 5*d.*: Mine cost, 161*l.* 6*s.* 8*d.*; Sept., 168*l.* 19*s.* 8*d.*; Oct., 172*l.* 16*s.* 8*d.*; merchants' bills, &c., 188*l.* 3*s.*: leaving credit balance, 74*l.* 0*s.* 5*d.* The balance of liabilities over assets was 21*l.* 18*s.* 6*d.* Arrears of call received at and since the meeting, 180*l.* A call of 2*s.* per share was made, payable on or before Feb. 1. Captain F. Bennett, jun., reported that since the meeting in Sept. the cross-cut the 56 had been continued, which had intersected a lode. The cross-course was looking favourable for the productiveness of the lode it intersects. The 56 may be expected to become more productive. The 44 was composed of spar, pebble, sandstone, and stones of copper ore. The 32 was poor, but kindly; and the 10 was composed of gossan, spar, pebble, sandstone, and a little copper ore.

At New Treleigh Consols general meeting, on Thursday (Mr. W. Little in the chair), the accounts showed a cash balance in hand of 57*l.* 2*s.* 7*d.* A resolution was passed that the mine be divided into 6000 shares instead of 8000, as formerly. A call of 2*s.* per share was made on 5320 shares, and the committee authorised to dispose of the balance, 680, at not less than 20*s.* per share, as, in consequence of the improved prospects of the mine, the shareholders unanimously agreed that was the lowest price they should be offered at. A very favourable report from the captain was read. The usual vote of thanks to the Chairman terminated the proceedings.

West Wheal Providence, on Wednesday, made a call of 7*s.* 6*d.* per share.

At the Acadian Charcoal Iron Company meeting, yesterday (Mr. J. A. Roebuck, M.P., in the chair), the resolutions, which appear in another column, were unanimously confirmed.

The Scottish Australian Investment Company directors have issued their report for the half-yearly meeting to be held on Friday next. The accounts show the operations of the company for the six months ending in the colony on June 30, and in London on Dec. 31. Several properties and interests, already known to the readers of the *Mining Journal*, were sold to the Scottish Australian Mining Company for 30,000*l.*, there being, further, reserved to the Investment Company a royalty of 5*s.* per ton on all coal, and 1-15*th* part on all ores, metals, and metallic minerals that may be raised from these properties in manner set forth in the contract of sale. As respects the Good Hope, however, the royalty is subject to an arrangement with the discoverer, whereby he is entitled to that royalty, or 1-10*th* of the net profit derived from mining operations in the property, at the option of this company. By this sale a profit of 19,093*l.* 13*s.* 2*d.* has been realised and carried to the credit of profit and loss. Since the last half-yearly meeting the 2270 shares in the Bon Accord Company have been sold, and a profit of 411*l.* 2*s.* 11*d.* profit on sale to Scottish Australian Mining Company, 19,093*l.* 13*s.* 2*d.*; profit on sale of Bon Accord shares, 411*l.* 3*s.* 11*d.*; transfer fees, interest, and sundries, 213*l.* 9*s.* 10*d.*=28,833*l.* 0*s.* 9*d.*: Salaries, rent, and petty cash, in colony, 12,987*l.* 12*s.* 2*d.*; managers' and sub-managers' commissions on profits, 1268*l.* 12*s.* 2*d.*; London expenses, 837*l.* 10*s.* 6*d.*: converting shares into stock and amount written off cost of office furniture, 54*l.* 18*s.* 7*d.*: leaving credit balance, 25,405*l.* 18*s.* 7*d.*, to which must be added balance standing at credit of reserved fund account, 32,231*l.* 0*s.* 8*d.*, out of which it is proposed to declare a dividend of 10,000*l.* (being at the rate of 10 per cent. per annum, less income tax), which will leave the sum of 22,231*l.* 0*s.* 8*d.* to the credit of the reserve fund account. The visit of the manager to England, after an absence of nearly eighteen years in their service, has been productive of much advantage to the company. The board have been materially assisted by him in effecting the disposal of the mineral properties which have been sold since his arrival; and every opportunity has been and will continue to be taken during the remainder of his stay in this country to consider and discuss with him personally all such matters as may be thought capable of being made conducive to the future prosperity of the company. One of the most important of these matters has already been so far matured as to induce the board to recommend his suggestions for the adoption of the proprietary. The manager has long considered that the financial position of the company has not been on so comprehensive and extended a scale as its machinery and capabilities justify and require. He has felt that a considerably increased amount of capital might be employed by the company to great advantage, and with scarcely any increase in the working expenses; and these views Mr. Morehead has urged on the attention of the board in an interesting communication on the subject. The directors, considering the services of Mr. Morehead during the long period of 18 years, and the expenses sustained by him in visiting this country, are unanimously of opinion that the sum of 10,000*l.* should be presented to him, subject to the approval of the shareholders at the ensuing meeting. Without attaching undue importance to the royalties sold in favour of the company from the mineral properties recently sold, the directors reasonably anticipate from them a future considerable profit. At the date of the last communication from Sidney the affairs of the company were progressing favourably.

committee was appointed to carry this arrangement into effect. The meeting was then occupied for some length of time discussing the subject of the education of miners, and the system of reporting engines, &c.

GEOLOGISTS' ASSOCIATION.—The council have invited Mr. Hyde Clarke to become a vice-president of the association, and he has undertaken to deliver an address at St. Martin's Hall, on Tuesday, Feb. 8, at seven in the evening, to the members of the association, on the establishment of a Geological Survey of England, by the organisation of sections and local committees of the association. The number of members enrolled since December is 170.

At the Manchester Literary and Philosophical Society, a paper was read on the practicability of counteracting a portion of the resistance at the head of a ship, by employing a revolving conical bow to work a steam propeller. The plan, that of Mr. Morris, has been patented by Mr. Robert Griffiths, engineer, London.

WEEKLY DIARY.

MEETINGS.

TUESDAY	Bronfodroy	38, King William-street—at 12.

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Now ready, price 1s.
THE PROGRESS OF MINING IN 1858,
BEING THE FIFTEENTH ANNUAL REVIEW.
By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in
1843), *Gleanings among Mines and Miners*, &c.
THE FOURTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTAL
SHEET to the MINING JOURNAL of Jan. 2, 1858.

A FEW COPIES OF THE REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES OF THE REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL's Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to Investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill, N.B. Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER and the YEAR, ENDING 31st Dec., 1858, with Particulars of the principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Four Years, &c., and of SPECIAL REPORTS ON VARIOUS IMPORTANT MINES, IS NOW READY, price One Shilling, at 117, Bishopsgate-street, Within, London.

Reliable information and advice will at any time be given on application.

Also, COPIES OF "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

CORNISH COPPER MINING ENTERPRISE, 1850 TO 1ST MAY, 1858, INCLUSIVE. By R. TREDDICK, Mining Engineer and Share Dealer, 4, Austinfriars, London. 1000 copies only are published, price bound 5s. per copy. Early application, to guard against disappointment, is earnestly requested.—Communications to be addressed to the Editor of the *Mining Journal*, 26, Fleet-street, London.

New ready,
I'S MINING FOR METALLIC ORES A LEGITIMATE AND PROFITABLE CHANNEL FOR INVESTMENT? OR IS IT NOT? By JOHN ROBERT PIKE.

May be had gratis on application, either personally or by letter, at his offices, 3, Pater-noster-court, Old Broad-street, London, E.C.

Now ready, price 3s. 6d., free for forty-four stamps,
THE JOINT-STOCK ACTS OF 1856, 1857, 1858, and 1859, BANKING ACTS OF 1857, 1858, with Notes, Forms, References, Full Information, all the Legal Decisions, and Copious Index. By THOMAS HUGH MARKHAM, Esq., M.A., Barrister at Law of the Inner Temple. London: Andrew Robertson, 30, Chancery-lane.

Just published, price 10s. 6d., crown 8vo. A
HAND BOOK OF RAILWAY LAW: Containing the Public General Railway Acts from 1838 to 1858, inclusive, and Statutes connected therewith. By ARTHUR MOORE, Esq., Secretary of the Dublin and Wicklow and Kingston Railways; Author of *Compendium of Irish Poor Law*, &c.

Goes far to supply what has long been felt as a want alike by solicitors, managers, and all others interested in railway guidance or management, are lucidly explained in an elaborate introduction.—*Railway Times*, December 25.

London: W. H. Smith and Son, 186, Strand, and Sackville-street, Dublin; Bradshaw and Blacklock, Manchester.

Just published, with numerous figures, 8vo., A
MANUAL OF THE MINERALOGY OF GREAT BRITAIN AND IRELAND. By E. PHILIPS GREG, F.G.S., and W. G. LETTSOM.

An important contribution to the science, containing detailed descriptions of species and localities, and new forms of crystals, &c.—Sixth Supplement to *Dana's Mineralogy*. John Van Voorst, 1, Paternoster-row.

Works published at the MINING JOURNAL office, 26, Fleet-street, London.

PRACTICAL TREATISE ON MINE ENGINEERING. By G. C. GREENWELL. In one vol., half-bound, £2 15s.; whole bound in Morocco, £1 10s. In two vols., half-bound, £3 3s.

TREATISE ON IRON METALLURGY. By S. B. ROGERS. £1 5s.

NEW GUIDE TO THE IRON TRADE, OR MILL MANAGERS' AND STOCK-TAKERS' ASSISTANT. By JAMES ROSE. 8s. 6d.

TRANSACTIONS OF THE NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS. Six volumes: 21s. per volume.

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GEOLOGY AND MINING—FOUR LECTURES, by G. HENWOOD, 2s. 6d.: by post 3s.

INVENTIONS, IMPROVEMENTS, AND PRACTICE, OF A COLLIER ENGINEER AND GENERAL MANAGER. By BENJAMIN THOMPSON. 6s.

TAPPING'S DERBYSHIRE MINING CUSTOMS. 6s.

TAPPING'S HIGH PEAK MINING CUSTOMS. 5s.

TAPPING'S EDITION OF MANLOW'S CUSTOMS OF THE LEAD MINES OF DERBYSHIRE. 3s.

PLAN OF VENTILATING COAL MINES. By WM. HOPTON. 3s.

SOUTH WALES INSTITUTE OF ENGINEERS. Parts I., II., and III. 2s. 6d. each.

ON COPPER SMELTING. By HYDE CLARKE, C.E. 1s.

Notices to Correspondents.

* Much inconvenience having arisen, in consequence of several of the numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

OLD TOLGUS UNITED—THE BILL IN CHANCERY.—Please reply to the following queries in your Notices to Correspondents:—

1.—What effect will the filing of a bill in Chancery have upon the future working of a mine? I refer to the Old Tolgus United Mine. Must the operations of the company necessarily cease until the opposition is removed, or does it merely affect the proceedings of the meeting last week, as reported in your Journal?

2.—Should the shareholders agree to some other plan of raising the money, will any great expense have been incurred by filing the bill? and who will have to bear the expense?

3.—Cannot individuals be compelled to pay their calls in any given time decided upon by the majority of shareholders?—QUESTER.

1. The more filing of a bill in Chancery against a mining company does not stop the operations of the company in any way, neither must its operations necessarily cease. It does not affect the proceedings of any meeting or transaction to which the bill refers. The reason is that the filing the bill is an act that may be done by any one without sufficient or legal grounds for so doing. If, however, the bill should be prosecuted to a decree, then such decree will bind the company according to the tenor of the decree.

2. The expenses of a bill in Chancery fluctuate with its length and other circumstances, but it must be a very stiff bill to cost 30*s.* The person who files the bill must pay its expenses, unless by decree the expenses are ordered to be paid by the company or persons against whom the bill is filed, or it is compromised on terms.

3. Adventurers can be compelled to pay their calls in any given time decided upon by the majority of shareholders. But to answer this query correctly, the cost-book rules or articles of association must be consulted, and the methods therein mentioned for proceeding against defaulting shareholders should be strictly followed.

LEAD SMELTING.—Your correspondent, "A," enquires if "A Lead Smelter" has supplied Mr. Tuson with samples of lead ore, &c., which he offered to examine. In reply thereto, I beg to say that a number were duly sent some time ago, and the particulars supplied for communication, which Mr. Tuson said would be necessary to hold during the examination, but since have not heard from him.—A LEAD SMELTER.

REDUCTION OF POOR ORES.—In all the processes undertaken by these gentlemen they in general forget the most paramount cost—that is, the expense of mining; their operations may be very useful in reducing poor ores when once they are to grass, but it is questionable whether it is of any utility to mine where the stuff is so poor. Mr. Sindling's process has been adopted in Fohsild in Norway, and there found efficacious. For many years there have been lying there at grass large heaps of stuff which were too poor to be reduced by the blast-furnace as they would not bear the expense of fuel; these have now been utilised. The cost of mining is not there taken into consideration, but I am quite convinced that Mr. Sindling is aware of the large deposits of copper ores of from 1½ per cent. to 3 per cent. which exist in Rosedal, and might be successfully treated by his method. Why is this not done?—because the expense of mining would be too great in the first instance. In the same country I have seen in the interior, near the Dorrefield, veins of ore of 60 per cent., but in such inaccessible places that the expense of getting the mineral would be greater than the value when reduced. Inventors in general have cheaply they can perform what they promise: my experience has taught me that in too many instances there are no persons who deceive themselves so much as projectors; they have no doubt of the feasibility of their schemes, but in the majority of cases they mislead the first cost. No one is more alive to their own interests than the copper smelters; how is it if they were at all practical that they have never adopted any of the patents of these economists? merely, in my opinion, because they have found them of no practical utility. Many of the new alterations in the furnaces are not patented; and, while on this subject, I may state that a double-bellied one, which has been in use in Germany for over 150 years, was lately trumpeted forth in this country as a new invention. The *Mining Journal* has drawn public attention lately to copper smelting, and a list of the several patents, with comments on them, have appeared in able articles on the subject; yet, while reading these with all due attention, I can perceive nothing that is likely to supersede the old mechanical method by reducing with fire, as now practised at Swansea. I am no enemy to improvement in copper smelting; I believe it is susceptible of some, but if this is to be effected it must be by practical men, and not by a set of empirics, who lay down rules and regulations on a subject of which they are not practically acquainted with the minutest details.—B. S.

TIN IN AUSTRALIA.—I should feel obliged if some well-informed correspondent would state in what part of Australia tin is found in the largest quantity: what it is worth per ton there; what the freight per ton is to England, and the value per ton when sent home; and if there are any means of smelting it in Australia? A reply to this enquiry will oblige more than—**ONE IN THE TIN TRADE: 7mo., Cornwall, Jan. 18.**

TIN-PLATES OF PUDDLED STEEL.—Mr. Spence, of Liverpool, has made an application for a patent for making tinned plates of puddled steel, and his application is opposed by Mr. Clay and others. Six months ago I sent a small piece of puddled steel down into Wales for that very purpose, but I never had a report as to its efficiency, although there was no doubt as to that. This I can at any time prove.—R. M. D.

WHEAL VELVET.—Can any of your readers inform me where this mine is situated, the captain's name, and also the quantity of mineral raised in 1858, if any?—W. TREGASKIS.

CARE VIVIAN.—In last week's *Journal* I observe a letter from a "Mining Student," stating that in Feb., 1857, Capt. Tregay, of Lostwithiel, predicted the discovery of lead near the 50 fm. level. I recollect Captain Tregay inspecting the mine, but was not before aware of his making the statement alluded to. Capt. Tregay certainly had a very high opinion of the north and south course as a lead lode, and even made an offer to work it for lead independently of the east and west lodes. This north and south lode has not been seen below the 10, where it produced a considerable quantity of lead. Judging from its underlie at that level, it must now be about 15 fm. from the shaft; and it is considered by many that it will prove equally, if not more, productive than our present lode. Your correspondent speaks of Care Vivian as a "puzzle." Certain parties who a few months ago depreciated the mine (in forgetfulness of the old adage that "those who live in glass houses shouldn't throw stones") are, doubtless, considerably "puzzled" at this (to them) unexpected discovery. It is, however, no "puzzle" to those who were acquainted with the mine, and who had observed the regular and continuous improvement of the lode from the 10 downwards.—**OSWERVER.**

ROSIE AND CANADA.—The error complained of in your report of the proceedings of this company appears to have arisen from the omission of the word "only" in an answer to a question as to the amount of the liabilities of the shareholders, which, instead of "if 3000," was obtained for the plant and machinery the shareholders would be secure." should have been "if only 3000," &c., the statement not being made with a view of stating the value of the machinery, &c.—B.

LADY BERTHA.—On reading Murchison's Review, I saw Capt. Thomas Richards's report of Lady Bertha Mine, in which he states the lode in the winze to be worth 14 tons of ore per fathom for 14 ft. long. Must the reader understand from this that the winze is 14 ft. at the bottom? if so, how many fathoms long is the winze 14 ft. wide? No doubt the question will meet Capt. Richards's eye; and probably he will answer it, as some assert that the bottom of the winze is not 14 ft. long, only 10 ft., and producing 16 tons of ore per fm. The directors or committee, to solve the difference of opinion, should send a man of their own.—**TRUISM: London, Jan. 21.**

ACADIAN CHARCOAL IRON COMPANY.—In reply to "An Old Shareholder's" letter of January 11, the amount of capital called up is now one-half of the sum named by him, in consequence of shares taken by the vendors in payment having since been relinquished. The price of blooms, 11*s.* to 12*s.* to which he alludes, should have been stated as local currency, being equal to from 8*s.* 16*s.* to 9*s.* 12*s.* sterling per ton. The Acadian charcoal pig would be so materially reduced in value by the use of coal or coke for its conversion into forged iron in this country, as to render it unadvisable to adopt such a course.

WORTHING MINING COMPANY.—In answer to "J. L." enquiry in your *Journal* of last week, I beg to say that if the writer is a shareholder he can obtain every information on applying at the office. I may state that the quantity of ore ground already laid open at the Bremer Mine renders the smelting works a most desirable acquisition to the company, the price of copper ore in the colony being only about 5*s.* or 7*s.* per unit. All ores of less than 7 per cent. are perfectly worthless, unless the company can run them down into regulus, and by the saving of freight and carriage make it profitable to ship them to England. We have some thousands of tons of ores of this quality, which can be immediately put into the furnace, and pay all the cost of the smelting works, for up to the present time we have thrown aside our lower quality ores, the 200 tons already raised and sold producing on an average above 19 per cent.—**GEORGE LAVINGTON: St. Helen's-place, Bishopton.**

SAFETY-LAMPS.—"T. R. (Neath).—The lamp and machine-key alluded to were patented by Messrs. Robinson and Ogden, of Manchester, and described in the *Mining Journal* about two months since.

ALTON MINING ASSOCIATION.—As an outlying shareholder, I should wish to enquire why latterly no reports of the progress of the mines have appeared in the *Journal*. The cutting of the lode under the Old Mine, we were told, had given 20 years' existence to the property; yet it is strange that no further information has been afforded us. These delays have probably occurred through the stoppage of the mountain post; if such has been the case, it would have been but an act of courtesy on the part of the directors to intimate such to the shareholders through the medium of your columns.—**CARLOS.**

LADY BERTHA.—On reading Murchison's Review, I saw Capt. Thomas Richards's report of Lady Bertha Mine, in which he states the lode in the winze to be worth 14 tons of ore per fathom for 14 ft. long. Must the reader understand from this that the winze is 14 ft. at the bottom? if so, how many fathoms long is the winze 14 ft. wide? No doubt the question will meet Capt. Richards's eye; and probably he will answer it, as some assert that the bottom of the winze is not 14 ft. long, only 10 ft., and producing 16 tons of ore per fm. The directors or committee, to solve the difference of opinion, should send a man of their own.—**TRUISM: London, Jan. 21.**

* The MINING JOURNAL can be procured at our office by Eleven o'clock on Saturday morning. Newsmen, therefore, can make the necessary arrangements to have the *Journal* at the several stations in time to forward by the mid-day trains, enabling many of our subscribers to receive their copies on the day of publication.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JANUARY 22, 1859.

Since we last week penned an article on the probable effect of a continental war on our MINING interest, those dark and threatening indications of strife and anarchy, by which the English and foreign markets were so agitated and depressed, have all but vanished from the political horizon. This is an event for universal congratulation. Its influence on European commerce will at the instant be beneficially felt, and should political sincerity on the part of those who rule the destinies of the people of Northern Italy, as also of other countries where the tendency to *progress* has been so long and sternly opposed, flat the act of grace in which Austria, now at the eleventh hour, evinces "deference to public opinion in Europe," such concession may be regarded as the beginning of that great end, PEACE, to which all experience of war directs the provident, the moral, and the wise. Old habits in the governing power are, however, not so easily relinquished; and the difficulty of restraining the ardent aspirants to popular liberty to the nicely graduated relaxation of coercive laws, which the political wisdom of the day may consider necessary, will very possibly retard for a lengthened period the complete pacification of the turbulent spirit which at this moment exists throughout the Austrian states particularly, and for which, it must be owned, there is an obvious and long-existing cause: therefore the commercial world, while holding jubilee on the disappearance of that hostile apparition by which it was so lately scared, should not repose too confidently on first appearances; and adhering for some time to come to great caution in their operations, remembering that "one swallow does not make a summer," and that the hand which thus with such show of liberality loosens the rein of Imperial Government to-day, may tighten it with a vengeance to-morrow, and throw all into greater suspense and agitation than before.

We make these observations for commercial purposes alone; and all that can be said on the subject is, if we are taxed with being somewhat ungracious to, and dubious of, sudden conversions to liberal policy, precedents can be referred to which will go to prove that words of peace must be guaranteed by acts before the confidence of trade and commerce can be given with prudence, and enterprise dependent on them carried on with safety. Having thus far remarked, as in duty bound, on the most important and most interesting event of the day, we consign the matter to the consideration of the great community whom this *Journal* represents.

The mining interest has now before it, whether there follows on the specific acts of France and Sardinia on the one side, and Austria on the other, as regards Italy conflict or tranquillity—a future, the prospects which are lighted up by our national prosperity at the present period. Money is plentiful, the rate of interest moderate, and the reaction in favour of home speculation marked and steady, and, at the same time, cautiously progressive. The late fluctuations in the money and stock markets, emanating from shadows and ambiguous words, have aroused speculators to the uncertain tenure of investment in foreign securities, and "dabbling in the funds" has of late been to the majority anything but remunerative; therefore, as a natural consequence, the attention of the monied interest turns to that sphere of enterprise offered by our home industry. And if capitalists will only take the trouble to investigate thoroughly the advantages now offered by mining in this country; carried on as it is upon the most scientific principles, and conducted or "managed" with integrity and the most business-like care and attention—if they will only weigh in the balance the "chances" (we call them certainties) which are consequent on prudent mine investment, against the "operations" which of late years have been effected on the Stock Exchange by the general traffickers in "bulling and bearing," it will be found that mining yields more sterling profits, and affords a better security to the enterprise.

It may possibly be advanced by the class to whom these observations are addressed that want of information has hitherto been the cause of their neglect of this vast source of emolument; but, in reply to such an admission, we have only to point to the late Review of Mr. J. Y. WATSON, and to that of Mr. J. H. MURCHISON, now published. The former gentleman brings an experience of eighteen or twenty years to bear upon the mining interest; the latter has also a lengthened experience, and both have accomplished the literary labour of placing before the public an authentic exposition of the existing state of British Mining with great fairness and evident and undoubted honesty of purpose. To assist the moneyed and speculative community in making the best use of the references thus placed within their reach, and having on a former occasion alluded to the Annual Review of Mr. WATSON, we now refer to that of Mr. MURCHISON, and venture to say a work in which the acumen and sound judgment of the author are more evident was never offered to the public. The strictures it contains at the very onset on certain "market" practices, whereby great injury has been done, and which are calculated to lead investors astray, are written with point and spirit, and

scientific and economical development of a mine depends success, and all this requires time. It is no use buying shares one day and selling the next; the gain, if any, in such instances is generally insignificant, although some may be quoted where by the sudden discovery of rich deposits holders have in a few hours doubled their capital; still, as a general rule, capitalists are on the safer side who, "not keeping all their eggs in one basket," divide their "risk" between the dividend, progressive, and speculative mines, and acting, of course, on competent advice, which is at the present available to a very advantageous and considerable extent, *persevere* in their mining industry.

Although there has been a very considerable decrease in the dividends of British and Irish mines this year as compared with the last, the amount for 1858 being £385,543/- 4s., against £467,122/- in 1857, leaving a difference of £82,578. 16s., the decrease is for the most part very clearly accounted for, and it is shown that the improvements calculated very confidently on in most of the dividend mines, together with the increasing value of the progressive and the cheering prospects of the speculative mines, authorise upon safe premises a high anticipation of very large returns during the ensuing eleven months. It is not our intention to devote a leader to a critique on this or the other Review, and reference is only now made so far as the matter contained therein bears upon that principle and practice which this Journal has ever advocated in favour of the mining interest; but it must be admitted, and we do so with much pleasure, the reports on various mines by experienced and practical inspectors which are to be found dispersed throughout Mr. MURCHISON's Review, constitute matter of great value and importance to the public, and while establishing the soundness of the author's views, place his work in the enviable position of being second to none.

It will not be deemed foreign to our approval of Mr. MURCHISON's literary production to revert here to the praiseworthy interest of presenting to Mr. WATSON a public proof of the high esteem which he so eminently merits for his long and consistent services in the cause of British Mining; and referring, at the same time, to a letter signed "X," which appeared in our Journal of Jan. 15, alluding to the scientific labours of Mr. ROBERT HUNT in perfecting the various operations in this department of labour, we may be permitted to observe that what may be termed the productive science of Mr. ROBERT HUNT is deservedly valued by the country, and will justly hand his name down to the latest record of British industry. His genius is *sui generis*, and none pay it sincerer homage than ourselves, but it cannot be forgotten that the tact, talent, and integrity of Mr. WATSON have mainly aided in forming a *Forum* for British Mining where labour receives its sterling recompense, and where the most important interests of the country are at once consolidated and protected. Mr. WATSON has done all this; Mr. MURCHISON not only lends him his valuable aid, but improves and embellishes that which he has constructed. Surely such men deserve in their sphere all the support and encouragement which Mr. ROBERT HUNT does in his; and it is no wise detracting from that gentleman's value to society to pay the tribute due to those who have ever given their support to the same cause. It is to a combination of such intelligence as each of these three gentlemen represents that England has to look for her moral greatness and her prosperity. All such are implements in the hands of Providence, who directs all; and the man who thus serves his fellow men will receive a reward higher than their estimation and more enduring than their gratitude.

The lectures at the GOVERNMENT SCHOOL OF MINES are progressing in a highly satisfactory manner, and impart a vast deal of useful information to the students who attend their delivery. It was never our intention to give them *seriatim*, but merely to select such as would tend to the information of the general reader, and at the same time afford some auxiliary aid to those who, from the force of circumstances, were prevented from attending the practical instruction of Jermyn-street. The lectures do not apply alone to the systems of mining and metallurgy as practised in the old countries of Europe, but the student is taught that in new lands, where the appliances of machinery, skilled labour, &c., do not exist, that he must in a great measure depend upon himself, and thus while all that has been done in the more ancient regions of mining is demonstrated, at the same time expedients are shown by which many difficulties may, to a certain extent, be overcome. In the metallurgical department, Dr. PERCY has afforded most valuable information, not only of the more scientific modes of reducing metals, but as well of the rude practices to obtain copper, iron, &c., which is still in use in semi-barbarous nations. Last year in the reports of the lectures we gave the methods of copper smelting as practised at Swansea, and Roraa, in Norway, as these were two opposite modes. Those who may be likely to be interested in the reduction of copper could not but find this information useful. Where coal can be obtained cheap, there the smelting as practised at Swansea generally has the preference, but in countries where this fuel is not to be obtained, then the blast-furnace, as used in Sweden, Norway, and some parts of Germany, is the only available plan to be adopted. As so much has lately been written about copper smelting, we merely cite this as an instance to show the utility of persons desirous of becoming either miners or metallurgists to be aware of all that has been previously performed in the sciences belonging to the profession they are about to adopt. Hitherto our attention has been chiefly confined to those lectures which purely treated of mining and metallurgy, but it is our intention to glance at some of the lectures delivered by the professors of the other sciences allied to mining. It is not to be supposed that the cursory notices we may be enabled to take will allow our readers without further study to become acquainted with all the details which are so ably and skilfully elaborated at this great educational establishment. Our aim is merely to show the importance and the utility of such an institution, and at the same time, by collating the more important facts that are taught there, give an impetus to further enquiries on the part of those who are precluded from the opportunity of acquiring the knowledge to be there obtained. We have received most gratifying testimonies from those of our countrymen employed abroad of the utility to them of the *Mining Journal*: to the resident in England it is a useful record, but to those across the seas, by its weekly information of passing events, it enables them to progress with the age, and at the same time it affords an opportunity of chronicling any important facts which may come under their practical experience, and tend to be useful to the interests of mining in general. With these brief remarks we conclude. The lectures will again be resumed, and we trust that they will not be found deficient in interest. As far as in our power lays, we shall endeavour to elicit such new facts as we believe will be regarded to be of general utility. No one has deplored more than we have the failures that unfortunately have in isolated instances prevented the development of mining education, and at the same time we can proudly say none have hailed the success of the spread of instruction among miners more than we have, and we do arrogate to ourselves the satisfaction that in this great movement we have been throughout useful and active pioneers.

The WEST HARTLEPOOL DOCK AND RAILWAY COMPANY is about to have forced upon it an adventitious notoriety through the allegations set forth in a pamphlet written by Mr. BENJAMIN COLEMAN, of Threadneedle-street, impugning the conduct of Mr. RALPH WARD JACKSON, the Chairman of the company. The pamphlet is addressed to the Preference share, Stock, and Bond holders of the undertaking in question, and it certainly bears upon the face of it a proof leading to the conclusion that, in justice to themselves and the public, the stockholders should institute a rigid investigation into the management of their affairs. There is, in the second page of this document, an extract of a letter written by Mr. COLEMAN to Mr. JACKSON on the 16th of December last, referring to an opinion previously expressed by the writer, "deeply affecting the honour of the board of directors as a body, and your's (that is, Mr. JACKSON's) as their Chairman and chief administrator in particular;" then follow reasons for so doing, based upon discrepancies in, or rather falsifications of, accounts, but the latter inference, knowing something of Mr. JACKSON as a public man, we deprecate. The allusion to the board of directors is to our mind unnecessary, if not peevishly captious, as it is not to be supposed that because a body of men are united by family ties and old friendships they are open to evil inferences; or, on the other hand, that because a gentleman on the board is incapable of caper like an opera dancer, or to ride up to a pack of fox hounds, he is incompetent to think, deliberate, and rightly decide. Again, in reply to Mr. JACKSON's letter of Dec. 20 last, Mr. COLEMAN asserts his belief, founded on reasons previously subscribed, "that there is culpable negligence, if not positive dishonesty, in the conduct of the West Hartlepool affairs." This is quite enough to startle us from any further comment on this strange affair at the present moment; and while we avow ourselves unwilling to believe so dark an accusation merited, and having only now done our simple duty in alluding to this pamphlet as we have done, we leave the West Hartlepool affairs to the

scrutiny of the shareholders, and await the verdict which they will be compelled to give on the case so ably and boldly submitted to them.

[FROM A CORRESPONDENT.]

As some excitement seems to prevail in consequence of the steps taken at the last meeting of the adventurers in the Old Tolnes United Mines, for raising additional capital by the issue of new shares *pro rata* to the existing shareholders at a nominal price, a few remarks on the subject may not be out of place. The shares (1200ths) are now worth in the market about £18/-, which would make every 600th worth 36/- Now, supposing the holder of a 600th part to be unable or unwilling to pay the additional 5/-, it is contended that his right to take such share would be readily saleable at the price of the 1200th part, deducting the 5/- payable upon the allotment of the new share; thus, assuming the 1200th part to be worth £18/-, the right to the allotment of one such share would, of course, sell for £13/-, as the seller would simply have to give the secretary written authority to transfer one 1200th part to the purchaser upon receipt, for the purposes of the company, of the 5/- payable under the resolution within the specified period. It is much to be regretted that whenever the slightest opportunity for unjustly influencing the market, either by depreciating or running up the price of shares, there should be so many ready to prey upon the unwary shareholders in one case, by inducing them to sell, and upon the public in the other, by inducing them to buy at exorbitant prices. It is trickery of this kind, far more than the bringing of worthless mines upon the market, that causes fear and distrust in the minds of capitalists.

A considerable number of shares of the North Rhine Copper Mining Company of South Australia have been officially "bought in" at the Stock Exchange during the week, in consequence of brokers being unable to deliver the stock sold. This showed great scarcity of stock on the one hand, and, on the other, that the purchases have been for investment, and not of a speculative character. The Stock Exchange has always laid it down as a rule that stock sold shall be delivered within a prescribed period, so as to render all transactions *bona fide*; and departure from these regulations would only tend to encourage speculative business; and if brokers will sell what they have not in their power to make over to purchasers, they must abide by the loss which ensues. It is a wise rule on the part of the Committee, and the more rigidly it is enforced the better will it ever be for the general character of business in stocks and shares generally, but especially in mining shares, which are often subject to rapid and great advance in price on the cutting of a rich lode, or the receipt of other favourable intelligence. How often does it occur that mining shares jump up in a day to three or four times the price they commanded the day before?

LECTURES ON COAL, AT THE COAL EXCHANGE.

The first of a series of lectures, On the History of Coal and Coal Mining, was delivered by Prof. J. MORRIS, F.G.S., on Jan. 13, in the rooms of the Coal Factors' Society. These lectures are delivered under the auspices of the Committee of the Coal Exchange Museum. The first, On the Geological Position of Coal, comprised a succinct description of the various rocks composing the earth's crust, with a view of showing the relative position of the strata containing coal and other bituminous substances.

Of the various mineral substances constituting, or embedded in, the crust of the earth, few of them are of more importance, or, perhaps, of more interest, than coal, whether we regard its nature, composition, probable origin, distribution, extent, or its important connection with our national resources. Coal may not only be called the civiliser, but also the contributor to the comforts, luxuries, and enjoyments of mankind.

From the early periods of history, Fire and Fuel have been well known social elements, either in connection with religion, domestic purposes, or for use in the arts. Among the nations of the East fire was held sacred; it was an important auxiliary in the Hebrew sacrifices, and regarded as a divinity by the Chaldeans, who had a city called Ur, signifying fire. The fire-worshippers of Persia have been long noticed, and even celebrated in poetry. The Persians possessed buildings in which the rites connected with the sacred element were performed, or assisted at, by the ghebers, or priests. Nor was fire unhonoured in ancient Rome, as the office of the vestal virgins clearly prove. By other nations or tribes fire was, also, considered an essential element in some of their ceremonies. Fuel is everywhere an important part in the practical purposes of life, and as a source of warmth in the temperate and colder regions of the globe, we cannot but regard the vast storehouse of coal contained in the strata of those regions as one among the many providential arrangements for the benefit of mankind.

The lecturer then adverted to the superficial, or surface contours of England, as being due to past physical changes, the explanation of which belonged to geological science, and specially dwelt upon the interior structure or mineral contents of the different districts, as bearing upon, and influencing the occupation of the inhabitants in each. Alluding to a traverse made (in each case) from south to north, he pointed out that the traveller in the eastern counties would pass over an undulating country, comprising a large agricultural district; in the central counties he would find an active population engaged and dependent upon manufactures, and that the busy hum of human industry was around our coal and iron districts; whilst in the most western traverse, through Cornwall, Wales, Cumberland, &c., the scenery would become grander and more rugged, and the people to some extent engaged in metal mining—as for tin, lead, copper, &c.

The various mineral substances in common use for building, ornamental, or useful purposes, were then dwelt upon, such as granite, paving-stone, marble, freestone, coal, slate, chalk, &c., as well as their characters and origin; and it was further shown that the rocks and materials forming the earth's crust—

1. Consist of different substances;
2. That the materials were not formed at the same time;
3. Nor formed by the same means;
4. And did not generally occupy their original horizontal position;
5. That the strata were arranged in a regular order of succession.

The practical value of the latter proposition was clearly indicated, for a person well acquainted with the order of succession of the rocks in this country, their character, and organic contents, would hardly fail to recognise their relative position in other districts, and which knowledge might further prevent fruitless and expensive searching for mineral substances in situations where they do not exist, and of which many instances are recorded of unproductive results in boring for coal.

Rocks have been chiefly formed by two agencies—the igneous and aqueous; the latter generally considered a destructive, the former a conservative agency. By an attentive study of the ordinary operations of nature, and their effects, a clear insight may be obtained of the formation of the different strata. The disintegration or wearing away of rocks is constantly going on by the meteoric action of wind, rain, frost, and ice, and the abraded and detached particles are brought down to lower levels, or within the carrying influence of streams and rivers, which not only assist in further scoping out their channels, but in propelling onwards the gravel, sand, or mud, and depositing them, according to their gravity, on the river sides, into lakes, or at the river mouths, forming bars or banks in the sea or estuary. The deltas of many rivers, or formation of land at their mouths, are striking examples of the wearing and abrading powers which have been carried on in the upland districts, and their removal and distribution of the material to lower levels, as in the alluvial lands of the Rhine, Po, Ganges, Nile, or Mississippi; the delta of the latter river being estimated at 14,000 square miles, the upper parts supporting a luxuriant vegetation, the lower or more swampy portion covered with grass and reeds—the whole delta, and its accumulating vegetable matter, not inaptly representing the origin of a coal seam.

The formation of gravel beds and submarine accumulations may be illustrated by the action of sea waves upon the coast line, the destruction of the cliff, and the subsequent carrying out seaward of the finer detrital matter, and the embedding therein of the remains of sea shells, crustacea, &c. Thus the formation of many rocks, limestones, sandstones, and clays may be explained by the combined action of chemical and mechanical agencies, acting through long periods of time, mixed up with the exuviae of organised beings living at the period when the rocks were in progress of formation; while many rocks bear evidence of fresh water or marine origin, old land surfaces, or proximity to land, are indicated by the beds of coal and strata largely charged with plants. All rocks thus formed are termed stratified. A large portion of England is composed of the stratified rocks, which have been gradually but successively deposited at different periods; these rocks have, therefore, a regular sequence in time, and a relative position to each other, which order is never inverted. They are further divided into three great systems or series—the oldest, or primary; middle, or secondary; and younger-formed, or tertiary; each again subdivided into minor groups,

but each having peculiar characters, both mineral and organic, by which they are readily distinguishable from the other; of these characters, the contained fossil remains are the most important. Thus, peculiar forms of Crustacea, the trilobites, and certain shells chiefly of extinct forms, as among the Lammellibranchs, the Brachiopods and Cephalopods of the nan-tloid group, as orthoceras, &c., and peculiar forms of sauroid fish, and a great proportional development of acrogenous plants, as ferns, &c., mark the palaeozoic period.

Reptiles of singular forms, many fish (ganoids), shells of different genera, especially ammonites, belemnites, &c., and trigonia, nerinae, &c., ferns and cycadeous plants and a few mammals, indicate the secondary period; while the tertiary period is characterised by shells of existing genera and many living species, a large number of mammalia and the vegetation related to the present surface. Of these systems the oldest constitutes the western district, the middle series is found in the central counties, and the newer series forms the land of the eastern counties.

Throughout these series more or less bituminous matter and coal are found. In descending order the tertiary rocks in this country yield peat and turf in the upper strata; the lignites of Antrim and the Bovey coal of Devon in the middle or lower strata; and, on the Continent, the brown coal of the Rhine, Germany, Bohemia, &c., and the lignites of the Paris basin. In the secondary rocks of England occur the Kimmeridge coal, the moorland coal of Yorkshire, the Brora coal of Scotland, and the jet-rock of Whitby. To this period may be referred the Wealden coal of Hanover, the Burdwan and other coals of India, and the coal of Richmond, Virginia.

It is, however, from the primary or first-formed series of rocks that we obtain in Great Britain, Europe, and the United States, the largest supply of the useful mineral, coal. The carboniferous beds or coal measures occur, geologically speaking, between the old red sandstone below and the new red sandstone or salt-bearing beds above. It was at this period of the earth's history, in ages long gone by, when the physical configuration of the surface differed from the present, that the lands and islands in the northern hemisphere were successively clothed with a rank and abundant vegetation, the source and supply of the fossil fuel, locked up in the deep recesses of the earth by the deposits of subsequent periods—a vast storehouse of coal—to be rendered available in long after ages to the industry of man, and the promotion of his social progress.

WELSH COAL—GOVERNMENT CONTRACTS.

In our last Journal we announced the fact that although the Wiltshire iron ore would not work with coke made from Radstock coals, the neighbouring works at Westbury, by using Ebbw Vale coal and coke in equal proportions, make good grey iron, and that the Seend Iron Company intend using Cwmillery coal and coke mixed with Ruabon. This announcement is, doubtless, highly satisfactory to the Welsh coal owners generally, as it fully proves the excellent character of their coal for metallurgical as well as commercial purposes. According to the latest published return of coals tried at Woolwich and Portsmouth dockyards, it appears that the quantity of water evaporated by Russell's New Black Vein coal was very large compared even with other Welsh coals, and since the value of these coals for metallurgical purposes has now been confirmed, they cannot fail to take a prominent position in the market.

In the official return alluded to we find that as respects Welsh coal tried at Woolwich, Russell's New Black Vein steam coal (Tyr Nicholas Colliery) gave the following results:—Water evaporated for each 1 lb. of coal consumed, calculated from 100 deg. constant temperature of the feed water, 9:56 lbs.; water evaporated per hour, calculated from the same temperature, 50:67 cubic ft.; percentage of clinker, 0:79; percentage of ash, 5:75. Fothergill's Aberdare stands next on the list, but is slightly below Russell's in the quantity of water evaporated, does not evaporate it quite so quickly, and makes twice as much clinker, it has, however, slightly less ash, and makes but little smoke, so that it cannot be considered that the return at all injures its reputation. It will thus be seen that Russell's coal possesses evaporative power fully equal to any other coal in the market; having a high percentage of carbon, white ash, and being free from sulphur and from anything injurious to bars or boilers, burning brightly and getting up steam quickly; added to these the New Black Vein steam coal has another great advantage—the small will get up steam as well as the large. Now, whatever may be said by disappointed individuals as to the incompetency and partiality of those connected with the Admiralty, no objection can be made to a coal possessing such qualities as those stated being chosen, and therefore, the announcement that a contract has been entered into for a supply of Russell's New Black Vein coal for the use of Her Majesty's steamers, and that it is giving perfect satisfaction, will be received with pleasure. With regard to the general opinion entertained of the coal, it may be stated that although the works have been but recently opened the coals have been highly ennobled by many large consumers, and the small is said to make a very excellent coke for locomotive purposes. With such results and such successes as these it must be admitted that the North Country owners will have some difficulty in proving their title to their claims as producers of steam coal superior to that of South Wales.

MINERAL CAPABILITIES OF OUDE.

Oude is now an object of considerable interest, because public attention has been concentrated on it for some time, in connection with its misgovernment, and its share in the horrors of the revolt; and now attention is the more readily given to its pacification, and the development of its resources, as a principal means for insuring peace. Among those who have turned their swords into ploughshares is Mr. L. E. Rees, so well known to the public as the historian of that eventful siege of Lucknow, in which he was engaged. As a contribution towards the pacification of Oude, in which he feels a natural interest, Mr. Rees is now engaged in bringing before the public his observations on the resources of the country, for which he has had good opportunities in an eight years' residence. We may observe that Mr. Rees is not engaged in the advocacy of any company or scheme, and that his attention has been chiefly devoted to the agricultural productions of the country. Those interest us little; but we are glad to avail ourselves of some information as to its mineral resources.

We may premise that, although the country was nominally acquired by us a few years ago, yet, by the intervention of the revolt, it is only now at our actual disposal; and it may be taken as an example of the vast resources of India, that this one country, now about to be opened to our enterprise, is as large as Scotland or Ireland, but very different in its geological characteristics. In these latter countries we have examples of a vast variety of formations split up into small parts and mixed up together; thereby we have an abundance of mineral products. It is far otherwise in Oude, where the surface, which may be considered as a general plain, is covered by uniform deposits, chiefly diluvial or alluvial. Thus we have presented to us a vast geological operation of nature, to which the basins and terraces now existing in our own islands present no parallel. We have nothing on our surface comparable in extent. We must go back to a geological period, and then our ordinary maps do not help us. We contemplate the South Wales coal basin as a grand operation, but that gives us no idea. We must take the area of the chalk formations at a period when the tertiary deposits existed not, in order to form some idea of the extent of such a geological region as Oude, and then, having compassed this, we nevertheless fail; for Oude is but a portion of the great valley of the Ganges—one vast plain. Such speculations are, however, of interest to the geological student, for he finds in these plains of Northern India, in the Pamirs of South America, and in the existing oceans, the examples of those geologic operations which have been the creative mechanism of the sandstone formations of our island, for instance, or others of the great phenomena which constitute the epochs of geological history.

In Oude there are no rocks, in the common sense, and thus the home geologist is deprived of the chief and prominent topics of his studies. Much of the surface, as we have said, consists of light soil, and the hard matter is composed of ferro-oxides, carbonate of lime, silica, and sulphate of soda. This is called *kunkur*, and is often found to constitute the banks of streams. The northern bound of Oude is, however, formed by the outlying ranges of the Himalayas, which here belong to the territories of Nepal, and the productions of which would be available to the inhabitants of Oude were there good means of communication, or were Nepal itself under English Government, instead of that of Jung Bahadoor, who monopolised its commerce for his own purposes.

The surface of Oude, though for geological purposes entitled a plain, presents many varieties. Its total rise from south to north does not, perhaps, much exceed 200 feet, till it reaches the *terai*, or jungle, at the foot of the Himalaya; but it is cut up by numerous rivers and *nudges*, or

streams; and in the south it is bounded by the Ganges, to the system of which its rivers belong. Some of the main rivers are navigable throughout the year; but the *gudees* in summer time can be crossed on foot. All these rivers and nundees overflow, and some of them change their course; though where they flow between hard kunkur banks, they seldom desert their course. They are, however, productive of a great variety of superficial changes, and between the streams the soil is heaped up in ridges; while in other places the streams in summer time are sunk deep below the surface, and beyond the reach of the agriculturist. Thus, instead of the flat lands of Holland or Flanders, we get a more gently rolling land, like some of ours at home, or the prairies of the West, but very different in its clothing or aspect.

The soils of Oude are chiefly argillaceous, varying in colour from light brown to black, which latter black soil contains carbonates, silicates, sulphates, phosphates of alumina, and potash.

There is more variety of mineral productions than might be supposed, and yet a paucity as compared with those we enjoy. The kunkur is used for various building purposes, but largely for the manufacture of lime. A shell lime is obtained from recent beds of shells, which are gathered, and burnt with cow dung.

The chief mineral production is, however, saltpetre, which is found in great quantities impregnating the alluvial soil of the country. The saltpetre formations are patches wherein saltpetre is found more or less prevalent. Some of these are, nevertheless, employed for cultivation; but there are others which are utterly barren, and employed for the saltpetre manufacture. By lixiviation these patches are made to yield saltpetre and common salt; and from the most barren soils carbonate of soda is obtained for the manufacture of glass and soap. The whole of these articles are largely used in the country, and considerable exports of them take place to the neighbouring provinces, but the chief trade is in saltpetre.

The bankers, Shah Beharee Lall and Rughber Dial, generally succeeded in obtaining from the late king's Government the contract of the saltpetre manufactured in Oude, producing an annual supply of from 600 to 1000 tons; but as smuggling in a country where no system prevailed was a matter of no difficulty, so it is computed at least three times that amount, as from 2000 to 3000 tons were exported as contraband to the English provinces; thus the total produce is very likely from 2500 to 4000 tons, but as under the English Government the monopoly will be at an end, the production will be largely increased. It will, however, be much more increased by the application of English capital and enterprise, for Mr. Rees has informed us that the processes of manufacture are most rude, consisting, as he says, of mere washing with small tubs and sieves. Mr. Rees estimates that the production will rise considerably under a peaceful Government, provided that means of transit are favoured, and the trammels imposed on the free export of the article be removed. Thus, for instance, the permission to export saltpetre to America will open a considerable trade. This saltpetre is refined at Cawnpore, Futtehpore, Allahabad, and Futtehgurh, the establishments of which forward the most highly-prized saltpetre to the Calcutta market. At present it is sent to the refineries mixed with impurities, but English firms will now establish in the Oude cities saltpetre refineries, salt and soda works, so that the produce of Oude will enter the market on better terms.

We may here mention that the manufacture of nitrates is not properly attended to in England, and that in case of a general war we might find ourselves in serious difficulty for the supply of a chief element of ammunition, and an important substance in the arts. The production of English sulphur has become a national resource of late years, but our operations in nitrates are entitled in the conversion of materials imported from abroad. The importation of nitrates from the East Indies and from the west coast of South America, in various forms and for many purposes, is enormous.

The salt trade, as we have observed, is another resource of Oude, but it is likely to be trammeled for a time, as Mr. Rees calls attention to the fact that in Bengal it is a Government monopoly. This cannot, however, long be the case, for the Cheshire Chamber of Commerce is loudly agitating for the abolition of the salt tax, and for throwing open the trade.

There are, it will be seen, no mines of metallic substances, and it is, therefore, unexpected to find gold among the products of Oude. There can be little doubt it is to be found more or less disseminated all over the country, and all over India; indeed, Mr. Rees states that gold dust has been found in many of the rivers. The Sone Nuddee, or gold stream, however, that best known and worked, and Mr. Rees states that it is the general opinion it might afford a profitable source of speculation and revenue. The stream rises in the almost inaccessible steeps of Nepaul, and bears away by the violence of its current in the upper valleys the gold which is supposed to be plentifully distributed in the veins and concretions of the primary rocks over which it runs, such being the usual article of belief in gold-washing countries, where the mother of gold is eagerly looked after.

The alluvial soil in which the gold has been found has been for ages known to the natives of the Kyreengurh district, but there, as in most places, the gold-washers are poor. They are inhabitants of the neighbourhood, hired by a speculative native banker of Lucknow, at 3d. or 4d. per day, according to the quantity returned by them. The process is the common one of panning. As is usual in a gold district, the country is unhealthy during and immediately after the rains, but is supposed not to be so in the dry weather. The temptation to apply the English stamping processes has been great, and before the revolt it was taken up by the late Mr. W. W. Reed, an energetic speculator; he was, however, one of the victims of the siege. Mr. Rees is one of those who consider it worth serious consideration.

We may observe that it is more than likely gold working in India will become of much more importance than it has ever been. Hitherto it has never been prosecuted with intelligence and enterprise, and although there are numerous known gold streams in India, hundreds of which have been worked, and some still yield a small produce, the quantity of gold raised in India is supposed to be very small. There are, however, in India many districts of the character of the Uralian and Siberian gold formations, and some approaching those of California and Australia; and when those regions near the hills come to be explored, to which the Society for promoting English Settlement is drawing attention, it will be by no means unlikely that some great discovery of gold will be announced to the eastern world.

Mr. Rees relies for the development of Oude on the construction of roads, the guarantee of the Oude railways, and the steam navigation of the Gogra and the Goomtee. It has been well observed in the *Leader* that in a country the size of Ireland there is one small river steamer (and that, we believe, has been withdrawn by the Government), and not one mile of railway. The *Leader* might have said there are no roads.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

JAN. 20.—The Coal Trade here continues in the same position as last reported. A meeting of pitmen was held at Leadgate on Saturday last. It was a local gathering, composed of men from the neighbouring collieries, and also by delegates from other collieries. The Chairman stated that Mr. Roberts, the lawyer, had been re-engaged to represent the interests of the pitmen, and that he would shortly open an office in Durham, when he doubted not ample justice would be done to their cause. He also stated that they intend to give him a salary of 500*l.* per annum, to meet which one penny per week would be required from each man. Several delegates addressed the meeting on the necessity of establishing and consolidating the Union. We are totally at a loss to divine what those interests are, that are thought by those misguided men to require the services of a standing lawyer to look after them. We think that the coal miners of this district will best consult their own interests by managing their own affairs, and dispensing with limbs of the law altogether. We can certainly conceive that it may be necessary on special occasions, when disputes arise, to employ a lawyer; but to employ a standing one is simply ridiculous and foolish, and calculated to do much harm, by engendering disputes and ill-will between the employers and employed.

A blast-furnace has been got into operation at the works of Hawks and Bell, near Washington. Those works occupy an excellent position, being situated near the junction of the coal railway, which forms the principal outlet for the north-west Durham coal-field with the North-Eastern Railway. Plentiful supplies of coal, coke, &c., are, therefore, of easy access, and iron ore can be had from the Cleveland district. The brand produced by this new furnace is highly spoken of. Extensive chemical works are also in operation here, with several works for iron manufacture, &c., on a smaller scale; one of the most useful of those being carried on by Messrs. Cook. A number of men are now employed at those works, a foundry and other works being in operation. They are principally engaged in supplying the numerous collieries in the district with coal tubs, and manufactured implements of various kinds. The works at this point have ex-

panded and increased very much lately; only a few years have, indeed, elapsed since it was quite a rural scene; but it is rapidly becoming a scene of busy activity.

The Brenkburne Coal and Iron Works, situated on the River Coquet, about 25 miles north of Newcastle, are still in existence, one furnace being in blast. We believe that considerable sums of money have been expended here, and the result so far has not been encouraging. Whether this is owing to mismanagement, or to the unfavourable nature of the field for such operations, we are not prepared to determine. However, a complete change in the management took place a short time ago. The staff is now composed mostly of Shropshire men, and many miners from the same county are also employed. We confess that this circumstance tries our risible faculties very much indeed. It is an old stale joke that "you must not carry coals to Newcastle;" what, then, are we to think of carrying colliers and miners from Shropshire to the same place? We have always been led to believe that mining in that county (Shropshire) was about on a par with that of the antediluvians; and we would as soon expect to meet with a colony of the ancient Romans who built the great wall, as with Shropshire miners on the banks of the Coquet. We expect to be able to give some particulars respecting these works next week.

On Thursday an inquest was held at the house of Mr. Palmer, North-road, Durham, on the body of Hugh Trainer, coal hewer, who had died at the County Hospital from injuries received in Sherburn Old Colliery, on Dec. 16. Deceased was 44 years of age, and was engaged in hewing coal on the day in question, when a quantity of coal that he was preparing to blast, gave way, and fell upon his leg, which it crushed in a frightful manner, producing compound fracture. He was conveyed to the Durham County Hospital, and when he arrived he was suffering severely from loss of blood. Death ultimately ensued. Mr. Atkinson, the Government Inspector, was present at the inquest. No blame was attached to any person, and the jury returned a verdict of "Accidental Death."

It is announced that a new private bank is to be opened in Newcastle shortly, but the names of the parties have not as yet transpired.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

JAN. 20.—The improvement spoken of during the last few weeks in the Iron Trade is confirmed by all the indications which can be relied upon as proving that a reaction has set in. Nearly all parties now look forward with confidence to the future. It is hoped that the general disapproval of most of the great powers of Europe of any rupture in Northern Italy—if that disapproval is not shared by the majority of the French people—will serve to prevent the hostilities which at one time appeared imminent. Almost all kinds of raw material used in the manufacture of iron are higher in price. The Coal Trade is improving, and it is anticipated that, should the present improvement continue, several blast-furnaces which have been blown out since the crisis of 1857 will be put in again.

A letter from Mr. W. H. Miller, who signs himself Honorary Secretary of the South Staffordshire Miners' Union, calls upon the masters to advance the men's wages, and invites them to reply to that appeal. Considering that Miller is only a herbal doctor, who has no connection with the colliers, and that it has never been stated how many members belong to the Union, it is hardly likely that such an appeal will meet with any response, especially as the letter does not allege that it was written at the request of any meeting.

Mr. Leigh, Stipendiary Magistrate of Wolverhampton, yesterday took occasion to express his extreme dissatisfaction with the manner in which the Truck Act is being enforced by common informers. He suggested that a Government officer should be appointed to enforce its provisions. There can be no question, as has been repeatedly stated in my reports, that the prosecutions are almost entirely got up by informers, who make a gain of the system, dividing the profits with the legal advocates who devote themselves to this particular line of practice. It certainly appears strange, with a penal Act which is most severe against those who pay in goods or at public-houses, that the colliers and other workmen are so indifferent as never to enforce the Act, except through the agency of such persons as inform in these cases. It is very doubtful whether Government could assist men so utterly indifferent to the means provided for protecting them from a wrong of which grievous complaint is often made.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

JAN. 20.—Iron of all descriptions has been in more active demand this week, and considerable quantities have been disposed of. Pigs meet a ready sale, and prices are firm. An advance is not looked for at present, but during the last few days a more confident feeling has been experienced in consequence of the pacific turn affairs have taken on the Continent. The apprehension which existed last week of disturbed peace tended to distress the markets, but the subsequent intelligence having removed the principal sources of fear, buyers are coming forward more freely, and fresh orders are put in hand. The trade meetings at Birmingham and Dudley have had a good effect here, and the ironmasters look forward, in common with those of Staffordshire, to an advance in the price of iron before the expiration of the quarter. It is known that stocks in the hands of home consumers are very low, and by this time they must be nearly exhausted. During the present week some of them have been compelled to make fresh purchases, and with the demand from America and the Continent, the works begin to be full of business. Railway iron is especially in request, and some large importations have been made this week. Ample trade is done to give full employment to the hands at most of the district works, but the masters agree in the opinion that an advance in the rate of wages cannot yet be made. We hear of no disagreements with the men on this subject, but complaints are made of the unreasonably long pay which have been introduced. Six, seven, and even nine to ten weeks elapse between settlements, and the men are, of course, driven to the "shop" to a greater extent than ever. This is necessarily felt to be a great hardship, and in some cases the tradesmen have appealed to the managers to go back to the former system. At Tredegar this was promised, as we have already announced, but in other works no hope of an alteration is held out. We believe this question to be one well deserving the attention of the proper authorities, since it is obviously most desirable to give the men as few causes for dissatisfaction as possible. Certain it is that relief is urgently called for, and some of the local papers constantly contain stringent censures on a system which seems adopted for the express purpose of driving men to the "shop."

With regard to the Coal Trade, we can also report an improvement in the demand, comparative activity being now felt in the ports. A good many vessels are now loading for French and Mediterranean ports, and steam coal is being bought freely. The following are the freights current at the time we write:—Aden, 50*s.*; Bombay, 50*s.*; Bahia, 28*s.*; Calcutta, 50*s.*; Cape of Good Hope, 38*s.*; Hong Kong, 52*s.* 6*d.*; Mauritius, 40*s.*; Monte Video, 31*s.*; Rio Janeiro, 34*s.* to 35*s.*; Shanghai, 55*s.*; Singapore or Penang, 38*s.*; Malta, 16*s.* 6*d.* to 17*s.*; Marseilles, 17*s.*; Naples, 15*s.* 6*d.*; Syria or Athens, 17*s.*; Alexandria, 15*s.* 6*d.*; Constantinople, 22*s.* 6*d.*; Gibraltar, 15*s.* 6*d.*; Lisbon, 10*s.*; Hamburg, 10*s.* 6*d.*; Plymouth or Liverpool, 6*s.* 3*d.*; London, 8*s.* to 8*s.* 3*d.*; Portsmouth or Southampton, 7*s.* to 7*s.* 6*d.*; French ports, from 11 to 17 francs. These rates show an advance generally from 4*s.* 6*d.* to 10*s.* 6*d.* as compared with those of last week. This is a satisfactory sign of the improvement to which we have referred. Merthyr and Duffryn coal (Nixon's) now fetch 21*s.* per ton in London. The freights for iron range from 17*s.* 6*d.* (New York) up to 27*s.* (Trieste).

It will thus be seen that a decided change for the better has set in, and a successful season lies before our iron and coal masters. At this moment the position of the principal concerns is satisfactory, and at many of the works extensions and other improvements are actively going on. Great attention is being paid to this subject at Rhymney, and the manager has lately carried out several designs for making the various departments more efficient than they have been heretofore. The Nant-y-Glo works, under Mr. Crawshay Bailey, are going on very prosperously, and a large and gradually-increasing trade is being done. It has been just decided to make a station at Nant-y-Glo, the Western Valley line from Newport having been extended to that place recently. This improvement in railway transit will prove a great convenience to the works, and will, doubtless, save considerable expense and trouble. At Tredegar, activity likewise prevails, and large supplies are constantly being turned out. The same observations apply to Ebbw Vale and Blaenavon; and, indeed, generally speaking there is an absence of that slackness which was felt during part of last year.

Mr. Rogers, in his useful treatise on *Iron Metallurgy*, has dwelt much

on the great waste inseparable from the present modes of mining coal. We believe this subject is now receiving the attention of several of our principal coalowners, with a view to the adoption of some system by which economy may be judiciously observed. It is well known that good serviceable veins of coal are neglected, or left half worked, on account of the richness of the district, and, in some cases, through the cupidity of the owners. There is no fear of our 12,000 square miles of coal being used up, as an eminent geologist has calculated that the South Wales formation alone, of the extent just mentioned, is capable of supplying England with fuel for 2000 years, even if the mines in other parts of the country should be worked out. Still, we may well be surprised that while economy has been carefully studied in the consumption of coal, and for this purpose many improvements have been introduced, the immense waste caused by the modes of mining it goes on from day to day, and no alteration seems to be even attempted. We have before quoted part of Mr. Rogers's remarks on this topic, and without attempting to re-open a subject which he has so ably handled, we may express a hope that some abatement may be made in the evil referred to, and that coalowners will see the advantage which accrues to themselves if prudence and care were exercised in lieu of extravagance and recklessness.

The Wenvoe Iron Company have recently discovered at Coedycimader a vein of highly metalliferous ironstone. Those who have examined it pronounce a very favourable opinion of its quality. Some has already been sent away by the South Wales line.

We have reason to believe that we shall shortly be called upon to announce a change in the management of the Abersychan Works, near Pontypool (the "British"), but at present we are scarcely at liberty to enter into particulars.

An effort is being made by the colliery proprietors of Swansea and its neighbourhood to construct a railway from the docks to Penclawdd, and eventually to Llanrhidian. Several collieries would be benefited were the design carried out, but at present it is only in its infancy.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JAN. 20.—The conviction which we have often expressed with regard to the permanent improvement in the position and prospects of the iron trade is being fully verified, as, judging from the reports which we have received from several districts, the trade is in a most healthy and satisfactory condition. There is less apprehension felt with regard to the warlike tendency of continental politics, and this has tended to infuse renewed confidence, which was being, in a great measure, shaken by the unfortunate speech of the Emperor of the French. We have private letters from France describing the efforts of the French ironmasters to increase the rates charged on the importation of British iron; but up to the latest date no alteration had been decided upon. The makers of the best brands of iron are well supplied with orders, but there is a difficulty experienced in disposing of inferior brands. The rates approved at quarterly have been well maintained. Some large orders for railway iron have been taken by two houses in Yorkshire. In Lancashire the firms generally are well employed, and the hands have settled down quietly to work.

The aspect of the Coal Trade, on the whole, is very satisfactory. The demand for the metropolitan market has increased materially; and it is only within the past fortnight that the supply could be adequately met. In Derbyshire everything is exceedingly quiet, and the trade improving; but in Lancashire we have a very different thing to notice. During the past week the colliers of Wigan have been, and are, out on strike; and on Monday morning the police were protecting the "nobasticks" on their way to work, when a sergeant of police interfered, and he was severely injured by the mob, who pelted him with stones, and the riot became so alarming that the authorities sent for a detachment of soldiers to quell the rioters, and it had the desired effect.

There have been several meetings of lead mining companies in Derbyshire since our last. The Haslam Pipe meeting was held on Tuesday, at the Red Lion Hotel, when there was a moderately good attendance of shareholders. The expenses were about 400*l.*, and the greater part had been owing to the eccentric nature of the mineral; about 200*l.* had been expended in "driving." A long discussion took place respecting the salary of the agent, who had 40*l.* per year to visit the mine from Chesterfield twice a week. Some dissatisfaction was expressed as to the payment of such a sum for the services of an agent who resided so far from the mine. Proceedings were also ordered to be taken against all shareholders in arrear of call.

There has been a meeting of the New Midland Company at Ashover this week, when a divided opinion prevailed as to the company being wound-up. There are two sections of parties; one desires to wind-up, and the other wishes to purchase the plant. We have not heard whether the new and enormous engine at North Derbyshire has been put in motion; but the operation cannot be much longer delayed, unless some accident should occur.

The Mill Dam Company are making great progress with the new shaft and the preparations necessary for the engine.

The most notable feature connected with the mining share market has been the great depreciation in the value of Eyam shares, which have gone down gradually from 60*l.* to 24*l.* and 25*l.*, at which prices numerous sales have taken place. The real cause of the fall is the condition of the mine, which is said to be much poorer than for a considerable period.

LEGITIMATE MINING AS AN INVESTMENT.

BY JOHN ROBERT FIRE.

Conspicuous in the northern hemisphere of the heavens stand the two constellations, *Taurus* and *Ursa Major*—the former having some resemblance to the outline of the noble animal whose name it bears, the latter rejoicing in the apparent singularity of a headless trunk—an accident which astronomers may some day be able to remedy, by finding that important member in close proximity, or even in actual contact, with its paws. The "Bull" and the "Great Bear" are, however, too elevated for the exercise of our critical powers, and we, therefore, leave them to the votaries of astral science. There are also "bears" terrestrial and "bulls" sublunar which by zoologists are classed with the great division of quadrupeds, and with the physical peculiarities of which the merest tyro in learning is ordinarily familiar. But the "bulls" and "bears" with which we have to deal are neither carnivorous nor ruminant, but belong, like ourselves, to the highest order of mammalia, and are designated in the nomenclature of science as *homo sapiens*. To many of our readers the terms "bull" and "bear," when used in connection with the stock and share markets, may appear as mystic words, denoting some occult process in the constitution and working of the markets beyond the ken of mere ordinary mortals. To some extent they would be right in arriving at such a conclusion, and as these two classes of individuals exercise a most important influence for good or evil as affecting the market prices of shares and securities in general, we have thought it right to demonstrate as briefly as possible their different modes of action, their particular aims, and the way such proceedings affect the interests of shareholders as a class.

Passing to general definition, a "bull" is an operator for a rise, and a "bear" an operator for a fall in prices—the stock to be delivered at some fixed prospective date. Many individuals there are who so buy and sell on what they believe to be information consisting with their various personal opinions, they being in such cases solely guided by circumstances. But the class to which we would desire to direct the attention of our readers are constitutional and indefatigable "bulls" and "bears"—men who, in the course of proceeding only, and who firmly believe that they would be uniformly unsuccessful in the attempt to tread any other path.

The "bull" is usually a sanguine man, recognisable by his joyous humour when business is brisk and values rising

he is acquainted with, the infirmities of our national character, and works energetically for isolated aggrandisement. Should he find any market particularly sensitive, it is immediately singled out for destruction. On the face of regularly continued sales of stock, the shareholders who are not personally acquainted with the value of their property are seized with alarm, and are glad to realise any amount of money, however small, in exchange for what they consider to be worthless shares, the "bear" thus reaping an abundant harvest out of the timidity and fear of a large section of the investing public. A terrorist by nature, his insidious dealings often destroy the public reputation of *bona fide* undertakings, and sap the foundation of credit on which the honour and well-being of business firms are built. Sometimes the "bulls" and "bears" meet in open conflict, both struggling for the mastery; but if we suppose them to be equally matched in speculative daring and length of purse, such is the tendency of men to look on the dark instead of the bright side of things when their property is possibly at stake, that without the most ordinary examination they will part with their shares at prices ridiculously out of proportion to their normal value, so proving the accuracy of the "bear's" calculations. That a vast amount of money is annually lost in this manner is, unfortunately, indisputable; but if shareholders, either *in a general posse*, would, on the one hand, carefully ascertain whether when the market value of their property is falling it is being systematically depressed for party purposes, and, on the other, whether prices are being unduly raised; and if such should prove to be the case to refuse to operate, they would ere long see the "bull" a desolate "victim" on the purloins of "Change," and the "bear" caged as a zoological curiosity amongst his plantigrade congeners.

MINING IN JAMAICA.

The advices by the West India steamer bring our mining intelligence from Jamaica to Dec. 26, and are, as usual, perfectly assuring, and confirmatory of progressive and satisfactory advancement.

ELLESLIE AND BARDOWIE MINING COMPANY.—Salisbury Plain : In every department the work is steadily advancing. Mr. Smith (the purser) sends you a very valuable sample, which has been declared here to contain silver, and has been valued at \$60 per ton for copper and silver.

RIO GRANDE MINING COMPANY.—Portland : Capt. Arthur writes that very heavy rains had interrupted the work, but in all respects the properties continued to improve in appearance, and only wanted sufficient labour to get out any quantity of valuable ore then in sight.

HOPE SILVER-LEAD AND COPPER COMPANY had shipped, per screw-steamer *Cleator*, for Liverpool 18 tons of silver-lead and 7 tons of argenticiferous copper ores, and the future prospects of this company are most decided : It is a great success.

CLARKENDON CONSOLIDATED.—Josiah Martin, Dec. 24 : Stamford Hill Mine : The lode in the engine-shaft is without alteration to notice since I last wrote to you. The men have completed the laying of the timber at the 58 for the reception of the 9-inch pumps ; they have also put in the solar in order to commence driving east and west on the lode in that level, the lode being very large and kindly at the place where we shall drive. I intend driving with native miners, at the same time the Englishmen will be putting the work in the upper part of the shaft. The 46 south, on the cross-course, is without alteration to notice ; the 46 west of engine-shaft, on the north lode, is still looking very kindly, composed of green carbonite and rich yellow copper ore, and letting out a deal of water. I have broken from this end within the last two or three days some very fine stones of yellow copper ore. The masons are getting on with building the chimney very satisfactorily. All other parts are progressing with vigour, and I hope ere long to have the whole set to work, which will enable us to go on at once to accomplish the object in view.

At the WHEAL JAMAICA meeting, on Dec. 22, it was reported that the operations at Charing Cross were being vigorously prosecuted. The correspondence with parties in England, with the view to carry out important objects connected with the company, has resulted in the machinery required for Charing Cross, to be forwarded to the island with as little delay as possible. The course proposed for the raising of additional capital, it was thought, would be found easy of accomplishment. As the ground is already unfurnished down to the 65 fm. level, a shaft had been commenced which can be sunk to that depth without the aid of machinery. The prosecution of this shaft, and the making of a good road between Retreat Estate and the mine, of which rather more than a mile had been completed (out of 3½), constitutes the principal working at the mine. The accounts showed a credit balance of 11767. 17s. 3d., including outstanding calls. The committee regretted that, in consequence of the non-arrival of the steamer, they were precluded from laying before the shareholders any intelligence from England.

FROM MR. JAMES CROFTS.—In the progress of a question of such moment to the country as that of Peace or War, the incidents of a single week may throw either a light or shade over the matter for good or evil, and it happens that during the week now passing the probabilities have become almost a certainty that the advent of war, if it be considered or admitted as at all certain, is a remote one, and probably, as much as any matter can, turn upon the question of finance. The exhausted treasures of the lately belligerent powers is producing that drag to hostile action which has become more, or as much, a matter of necessity as prudence ; and, therefore, it would appear that for actual war the time is not yet, to whatever extent may be visible that "note of preparation," which is indicated in the strengthening of forces, or the guarding more closely of frontiers. The event of the death of the King of Naples (just announced) if true, judging from its effect on the Funds, which have fallen only ¼ per cent., rather indicates good than evil to the cause of peace, and in its immediate and future consequences can scarcely fail to benefit the oppressed populations of the Two Sicilies, apart from any "complications" which may ensue in settling the policy of the succession in reference to their political tendencies, so as that weightier powers may coincide. On the whole, the markets, however, are still good, and with the exception of a rather diminished business from the provinces, there has been great activity in, and avidity shown, to purchase every class of good stocks in mines, both dividend and non-dividend, and in many of them (the former in particular) a considerable advance must be noted—such as in Providence, Wheal Margery, Bedford United, Dolcoath, Great South Tolpuddle, South Caradon, and St. Day United ; whilst Wheal Mary Ann and Tinicroft are lower. Par Consols, Wheal Trelawny, Wheal Buller, Wheal Bassett, South Frances, North Bassett, Minera, and Alfred Consols (all the preceding being first-rate dividend-paying mines) have shown little fluctuation in value.

A reference to the writer's last letter may be necessary to render the following explanations fully understood. A most satisfactory meeting was reported of Old Tolpuddle United, when the number of shares in the mine was increased, in lieu of a call, to 1200, by the creation of 600 new shares at 5/- each, an apparently sound resolution, and unanimously voted. By intervention of his legal advisers, the said shareholder, who to the last (as it is stated) held back the amount of calls due from him, has now applied for an injunction in Chancery to annul the said issue of new shares, on the ground of its illegality according to the rules of the cost-book of the mine, which error (if it prove to be one) the management are about to repair by calling a special meeting for the special object of providing funds for carrying out this valuable property to a successful issue. The manner in which this legal proceeding has been conducted by an inundation of notices to shareholders and non-shareholders promiscuously, and in many cases in duplicate, has not met the entire approval of the mining market, nor has any sufficient cause yet been shown, or is apparent, for the necessity of any measure beyond that of a protest to the Management, to which they would have been equally bound to listen as to a "Bill in Chancery," and its consequent heavy expense. In the meantime the shares have become quiescent as regards transactions in them, but firm in value when sought for, and, pending these proceedings, the old shares (600) will, of course, be alone dealt in.

Pendine Consols Mine is progressing most satisfactorily, and the shares are reaching a high figure. Next week 170 tons of copper ore, the produce of two months' working, will be sampled, which is said to be of a better quality than heretofore sold. The average price of the sales made in the quarter March to June, 1858, was 37. 6s. per ton. Wheal Addams shares have undergone a rather serious reduction in price, there being scarcely buyers at above 20s. The cause alleged is a report (apart from the management) adverse to the value of the mine, as far as at present developed, whilst it appears, even from the report in question, that the mine, owing to water or other impediments in the levels, was not in a condition to afford the means of a perfectly fair report, and in consequence another is promised by the management, which it is hoped will enable the public to estimate the property at its true value. Lady Bertha Mine is also retrograding, the shares leaving off at 19s., or thereabouts, and a lower price by some dealers anticipated. This slippery property has long stood in the estimation of the writer as not possessing any of the elements of investing stock, but it may have merits yet to be developed. Rosewarne United shares have experienced a perfectly sudden rise from 36/- to 45/-, but leave off (as really might be expected) sellers. A retrospect of the former fluctuations, equally as sudden as the present, in the value of these shares may be taken with probably great advantage to holders and caution to buyers, since it does not appear that the unintiated that any *bona fide* cause exists for the present advance, and to realise at the advance is the best advice possible under the circumstances. North Minera have seen rather largely dealt in, the demand having been for investment, and late prices are generally sustained ; more regular, or, if possible, regular, weekly reports in the Journal is in the opinion of some shareholders, highly desirable. Late shares appear to be fast going into obscurity, so far as dealings in them are concerned, although few offer on the market. The disappointment appears to arise from the non-cutting of the "Pine vein," so long promised or expected. In the meantime another call of 2s. 6d. per share has been made, applicable (as it is observed) only to the new shares issued at 10s., and which section of the shares stand at 15s. paid, whilst their value as a marketable article is quite nominal. Great wealth may yet come out of this mine, unless the existence of the "Pine vein" (of lead ore) is an illusion, which can scarcely be imagined, and as a specimen to be greatest rate mine—had had the management of the books and accounts transferred from Mr. Longridge to No. 27, Austin Friars, London, and considering how generally unsatisfactory the conduct of shareholders a local financial management has proved in a number of mines, during their progressive course, this change, without disengagement to any individual hitherto engaged in it, must be considered "a step in the right direction" for the future welfare of the mine, which is rapidly developing for the resumption of dividends. The call lately made in the country of 1s. per share was confirmed by the London meeting. Wheal Edward and Sorribes Consols remain quiet, and still drooping in price, whilst Great Wheal Alfred has advanced to 32s. buyers.

Value of Towy shares are in great demand, and at an advance—the late call of 1s. per share having benefited the property, although its effect was, *prima facie*, calculated to produce a contrary effect upon a mining in the Dividend List. They will probably advance considerably, the present price being preposterously low. Catherine and Jane Consols sample 37 tons of lead ore, the produce of three months' working ; and there being an advance of 20s. a ton realisable, this property may be considered as progressing satisfactorily, and will become more so should the return of ore increase. About 500 tons of iron ore will be sold at 1s. 6d. per ton will also augment the credits of the mine. In 7146 shares the present price gives a large margin for profit to an investor, being only about 2000/- for a mine in full work, and as close as possible to paying costs. Kelly Bray shares have also advanced in value to 2½ to 3½. The mine is in great favour and highly spoken of. Wheal Arthur does not improve, and the payment of calls in arrear. Herdstone in considerable demand, but no sellers in the London market. Bedlam have been more enquired for, and should be classed as cheap shares at 4s. 6d. to 5s. Holmibush Mine is said to have improved during the week, and other safe shares to invest in at present rates may be mentioned. Round Hill, Wheal Sidney (greatly improved), New Treleigh, Wheal Crebor, North Roscar, Great Hewas, South Lady Bertha, Denham Bridge, and Great Wheal Martha—the three latter particularly recommended as speculations, at a price not often heard of for any property which has really attained the name of a mine. Rosewarne and Herland much enquired for, and business done at 9½

The writer intimates, in addition to the fact as stated in his usual advertisement, that he has extended his business to other shares and stocks besides British Mines, and has made arrangements with a firm standing high on the Stock Exchange to facilitate operations in every description of stock there dealt in, without any charge for admission beyond the Stock Exchange rate. The Stock Exchange List of transactions up to three o'clock each day may be had of Mr. Crofts, on applications from the country.

From Mr. LELEAN.—The mining market is very active for good mining shares—such as West Seaton, South Caradon, Providence, Margaret, Charlotte, East Trefusis, Trelyon Consols, North Dolcoath, Pendeen, East Bassett, East Russell, South Cunderrow, Wheal Kitty (Levant), Mary Ann, Bell and Lanarth, Trelawny, Kelly Bray, and St. Ives Consols ; and stock cannot be obtained excepting at advanced prices. It is anticipated that the East Bassett lode will skirt East Trefusis, and in consequence of this rumour a great demand has sprung up for these shares ; closing price, 4/- to 5/-, Bell and Lanarth progress favourably. Providence are likely to pay 4/- next time. Charlotte maintain their late rise ; the mine continues to improve. East Bassett are firm, 180 to 182½, although reports were sent from Redruth stating the "rich lode in the 80 end is cut out." Lord Bertha has sadly disappointed the shareholders, as will be seen by Capt. Richards's report, published in Mr. Murchison's Review of Dec. 31, 1858, page 50. This report is dated on the 7th inst., and confirmed by Capt. Metherell's report of the 19th. South Condurrow is attracting attention in the neighbourhood of the mine ; the call of 5s. will set the mine in first-rate order, now that the dead branches are lopped off. The locality is a good one. Trelyon Consols advance in price as the mine progresses. The great rise in tin has caused a great demand for these shares. We would draw attention to East Providence, selling at about 10s. to 12s. 6d. ; and if 500 shares were drawn off the market, I should not be surprised to see a rise of 500 per cent. in a month. Kelly Bray is making profits, and likely to increase them. Old Tolpuddle is enveloped in mist, in consequence of a quarrel between two shareholders. This is too bad. However, the committee have taken a very proper course in calling a special meeting. East Russell maintain their proud position in defiance of all opposition. Tocock advanced to 19s. 6d., and left off sellers at 18s. 6d. East Devon is looking well. North Bassett and North Crofty are low, and worth looking after. The dread of law prevents West Bassett and South Frances rising ; these are good mines, and are likely to continue so for many years. North Minera is looking better, and great confidence is entertained of success. Bryntail is being developed with vigour ; the prospects are cheering, and good results are expected. North Robert appear to be cheap at present prices. Cradock Moor will most likely rival her neighbour in tin. Wheat Unl—what is the matter ? One broker has instructions to buy and another to sell. Old Ding Dong will soon make a noise ; the present price of shares 8/- to 10/- We have several good mines in view, and as soon as the dead branches are cut off shall have great pleasure in bringing them into notice.

BEDPLATE IRON SLEEPER PERMANENT WAYS.

Public attention is again directed to the advantages to arise from developing the patent granted some short time since to Mr. Thomas Wright, for what is now well-known as the Bedplate Iron Sleeper Roadway, and upon which 100 miles per hour may be performed with perfect ease and safety. It is applicable to all descriptions of rail, and can be employed alike upon broad and narrow gauge lines ; and it is said to be expressly adapted to sustain the highest speed and heaviest traffic with the greatest durability and lowest cost of maintenance, as it combines the advantages of the longitudinal and transverse systems, as well as the properties of the wooden with that of the iron road, dispensing with all loose parts. The strongest and by far the most desirable modification of the invention is the continuous bedplate roadway, the distinguishing feature of which is the employment of a single sleeper as a complete piece of roadway in itself, consisting of one compact and solid mass of iron, capable of sustaining a pair of rails without any longitudinal or transverse joints, being constructed similarly to the bed of a lathe. A slip of wood is interposed between the rail and sleeper, and also between the ends of the sleepers. By this invention the whole line forms one immovable mass, smooth and unyielding, resisting the oscillation of trains, and preventing all lateral and vertical motion whatever.

Perhaps the greatest recommendation, however, in favour of the new system is the extremely small number of separate pieces required for every mile of line laid, compared with existing systems. There are 440 longitudinal detached iron sleepers in a mile, and estimating the weight of each at 1 ton, the price at 5/- per ton, and including the fastening, would be 2445/- per mile single line, without the rails, which, notwithstanding this increased cost, is undoubtedly the cheapest for the increasingly heavy traffic of the railways of this country, and always retains an intrinsic value, while the ordinary wooden road, with all its mechanical defects and other drawbacks, is in a few years valueless. As a proof of this, it is asserted that "the ordinary wooden sleeper railway is composed of 19,842 separate loose pieces in a mile 'unfished,' but when fished is thereby increased to 26,000 loose pieces, while the bedplate iron solid sleeper system contains only 7000 pieces, being a reduction of 19,000 loose parts, as compared with the fished wooden railways, thereby reducing the wear, tear, and shaking loose of the various parts, which is a prolific source of the great expense of railway maintenance.

Where expense is an object, the difficulty is met by an economic application of the invention (the sleeper being in this instance designated the transverse iron solid sleeper) with the flat-bottomed rail applied. This modification is suited also to the ordinary bridge rail, and, whether employed upon narrow or broad gauge lines, stretches across the whole width of the way, without any transverse joints, supporting at once a pair of rails upon one thoroughly permanent sleeper in one piece, and securing alike the gauge of the line and the tilt of the rails, also the joints of the rails from lateral and vertical motion. This road is produced as cheaply as an ordinary wooden sleeper railway, and has the properties of the wooden in combination with those of the iron road, besides ensuring the greatest amount of efficiency in its construction, together with great economy, strength, and usefulness, as well as facility for repair. The several classes of bedplate sleepers are made of various weights, so that by a judicious choice they would be found equally valuable for our heaviest worked lines at home, and for the light tramroads which it is proposed to construct in the less commercial districts of India and the colonies.

ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS.

The annual meeting was held on Tuesday at the Town Hall, Manchester. Mr. Wm. Fairbairn, C.E., F.R.S., president, occupied the chair ; and amongst those present were Mr. Thomas Bazley, M.P. ; Hugh Mason, the mayor of Ashton-under-Lyne ; James McConnel, W. W. Plat, John Appleby, G. Peel, Wright Turner, and William Booth, Manchester ; Edward Ashworth, and Charles Heaton, Bolton ; E. A. Wright, Oldham ; Richard Hurst, Rochdale ; J. B. Booth, Preston, &c. The reports of the committee of management, and of Mr. R. B. Longridge, the late chief inspector, were read.—

The number of boilers under inspection at different periods was—in 1856, 1500 ; 1857, 1532, with an income of 1599/- ; 1858, 1561, with an income of 1638/- The revenue of the year was 17577. 3s. 6d. ; and the balance remaining in the bank was 1051/-, against 1069/-, at the commencement of the year. On the whole, the committee regard the financial position of the association with greater confidence than hitherto. The ordinary services rendered by the officers had been—Visits by chief inspector, 513 ; quarterly visits by the sub-inspectors, 2580 ; thorough internal and external examinations, 235 ; annual indications of engines, 603. Special services : Examinations by sub-inspectors, 114 ; additional indications by sub-inspectors, 138 ; special indications by the same, 6. The committee regret that though provision was made for one thorough internal and external examination per annum of every boiler under their superintendence, yet only 235 such examinations have been made out of a total of 1261. Adding the 114 special examinations, the total was only 349. As regarded the important question of the incrustation of boilers, the committee, as a basis for further investigation, have deemed it expedient that the water supplying the boilers in various parts of the district should be analysed, and Dr. R. A. Smith was engaged in that object. The committee would again remind the members and the users of steam power generally, that this association was established for the purpose of preventing, by scientific and periodical inspection, the explosion of steam-boilers, and for promoting their economic use. The committee hope that they need do no more than urge upon all users of steam the desirability of a continuance of that support to this association, whereby it will be enabled, so far as careful examination and experienced and competent advice can contribute to that end, to prevent those frightful accidents to life and property to which reference has already been made. In conclusion, the committee refer to the retirement of Mr. Longridge, and the appointment of Mr. H. W. Harcourt, C.E., as chief inspector."

The CHAIRMAN, in the course of the adoption of the resolution, congratulated the meeting upon the prosperity of the association. It was very desirable that all the members who had boilers should be careful to make provision for their inspection by the inspectors. It was also essential that regular indications of the engines should be taken, together with diagrams showing whether they were working economically or otherwise ; for in this way a great saving of fuel may be effected. Another matter of importance was the incrustation in boilers. It had been found that much of the water used was impregnated with a sediment, and it was, therefore, necessary that the boilers should be periodically cleaned, either once a fortnight or once a month. The executive committee had engaged Mr. Angus Smith to analyse the waters in the neighbourhood, but his report would not be presented to the Association for two or three months. To ensure a thorough examination of boilers it was desirable that there should be special visits by the inspectors, at times suited to the convenience of the members. A question had been raised as to the extension of the limit of the society's operations. The present limit was 30 miles, but an offer had come from a greater distance, and he personally saw no objection to the extension of the limit to 50 miles, provided the additional revenue covered the expenses. At the same time, if the members considered it desirable, he had no objection to the formation of new and separate associations in these distant places. He believed that the operations of the society had resulted in the saving of a great number of lives and a large amount of property. He had recently investigated the causes of explosion from the collapse of flues, and had found that the strength of a flue was in inverse proportion to its length. A flue of 15 ft. in length would bear twice the pressure per square inch of one of 30 ft. He was also about to carry out some experiments with respect to surcharged and combined steam.

Mr. T. BAZLEY, M.P., seconded the resolution. He was not sorry to see that a rival institution had been called into existence, for if they were protecting the lives of their fellow-men, and increasing the love of science, there could not be too many agents in such an excellent work. At the same time, it was only fair to state that the members of this association had from the first been actuated by feelings of benevolence, combined with a desire to promote the advancement of science, and they had no pecuniary result in view. With regard to the extension of the society's operations, he was of opinion that no limit should be fixed, but that such application should be decided by the executive committee or the officers. The resolution was agreed to.

On the motion of Mr. Boorit (Preston), seconded by Mr. George Peel, a vote of thanks was passed to the committee of management.

Mr. E. ASHWORTH, in moving the appointment of the new committee, mentioned that Messrs. Peart and Darlington, had offered 54/- 10s. per annum, for the inspection of 50 boilers, and he thought their offer should be accepted.

Mr. HENRY MASON seconded the motion, and described the good results which had followed at his own works from the inspection of the society's officers.

The motion was carried ; and the vacated chair having been taken by Mr. Bazley, M.P., a vote of thanks was passed to the Chairman ; who in responding suggested that photographs should be taken of all the accidents to boilers ; that a carefully prepared report by the chief inspector should be entered in a book kept for the purpose ; and that a museum should be formed of everything connected with boilers and steam-engines.

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—H. C. VION, Paris : A new mode of obtaining atmospheric electricity, and terrestrial electricity, and its industrial applications, and in apparatus for the same.—J. LEES, W. HEAP, Ashton-under-Lyne : Machinery for punching square holes in the ends of rollers and other articles.—J. H. JOHNSON, Lincoln's Inn-fields, and Buchanan-street, Glasgow : Improvements in the manufacture, or production, and casting of steel, and in the apparatus employed therewith.—W. FOOTMAN, Strand : Breaks for retarding and stopping railway trains, carriages, or other vehicles.—F. E. GUERINOT, Paris : Application of an apparatus to railway locomotives, wagons, and carriages, for the purpose of lessening the effect of concussion in the event of collision.—J. BROWN, Rotherham : Buffers, draw springs, and bearing springs.—J. B. MORGAN, Liverpool : Improvements in propelling navigable vessels.—L. G. HIGHAM, late of New York, United States, now of Edmund-place, London : Obtaining submarine electrical conduction.—J. BUCHANAN, Greenock : Oil cans or lubricating apparatus.—A. V. NEWTON, Chancery-lane : Process of, and improved apparatus for, separating metals from their ores.—J. H. JOHNSON, Lincoln's Inn-fields : Machinery and apparatus for boring and piercing rocks, applicable also to the dressing or working of stone, and as a power hammer gavel.—C. F. VASSEUR, Strand : Chains and bucket pump.—I. A. NORMANDY, Judd-street, London : Process of distilling and clarifying resinous substances.—J. BIEBS, Kentish-town : A self-acting carriage wheel brake.—C. WILLIAM SIEMENS, Adelphi : Supports for electric telegraph line wires, and in tools or apparatus to be used in the construction of such supports, part of which improvements are applicable to the joining of pipes and other articles.

MANUFACTURE OF COPPER PIPES AND TUBES.—Mr. Broome (for Messrs. Liebau and Egrot) provisionally specified an invention which consists in manufacturing copper tubes and pipes without joint or weld, and either straight or curved, by depositing copper by a galvanic battery on and upon core of lead or other fusible metal or material capable of being fused or melted by heat, or otherwise reduced and removed. The core may be solid or hollow, and when hollow may be allowed to remain in the copper tube, or may be removed by melting, or otherwise.

DUN MOUNTAIN COPPER MINING COMPANY (LIMITED).—NOTICE IS HEREBY GIVEN, that the ANNUAL GENERAL MEETING of shareholders of the Dun Mountain Copper Mining Company (Limited) will be HELD at the London Tavern, on WEDNESDAY, the 26th January, at One o'clock precisely, for the transaction of the ordinary business of the company.

At the said meeting, the following directors will go out of office, viz.:—Robert Porter, Esq., Billiter-street; William Piper, Esq., St. George's; but, being eligible for re-election, they hereby offer themselves to be re-elected accordingly.

By order of the Board, FREDERICK SAUNDERS, Sec.

6, Great Winchester-street, London, E.C., Jan. 12, 1859.

THE SCOTTISH AUSTRALIAN INVESTMENT COMPANY (LIMITED).—NOTICE IS HEREBY GIVEN, that the HALF-YEARLY GENERAL MEETING of the shareholders of the Scottish Australian Investment Company (Limited) will be HELD at the London Tavern, Bishopsgate-street, London, on FRIDAY, the 28th day of January instant, at Twelve o'clock at noon precisely.

And NOTICE IS FURTHER GIVEN, that on the same day, immediately after the business of the half-yearly ordinary general meeting shall have been concluded, a SPECIAL GENERAL MEETING of the shareholders of the said company will be held at the same place, to consider the propriety of increasing, and if deemed desirable to increase, the capital stock of the said company, by the creation and issue of new stock to such an amount, in such mode, and on such footing or terms, as may appear to the meeting to be expedient.

The transfer books of the company will be closed on Saturday, the 22d inst., preparatory to the meeting and payment of the dividend, and will remain so closed until after Tuesday, the 1st day of February next. By order of the Directors,

24, Gresham-street, London, Jan. 15, 1859. C. GRAINGER, Sec.

TO THE SHAREHOLDERS OF THE COMPANY OF PROPRIETORS OF THE ROYAL CONSOLIDATED COPPER MINES OF SAN FERNANDO, CUBA (LIMITED).—NOTICE IS HEREBY GIVEN, that, at an extraordinary general meeting of the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), held at the London Tavern, Bishopsgate-street, on Monday, the 10th day of January, 1859, the following resolutions, passed at an extraordinary general meeting of the said company, held at the said London Tavern, on Monday, the 29th day of November, 1858, were read:

Resolved.—That the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), be wound-up voluntarily.

That Cunningham Borthwick, Esq., Thomas Close, Esq., Walter Sharp, Esq., and William Dallas Starling, Esq., be the liquidators for the purpose of winding-up the affairs of the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), and distributing the property thereof.

It was then moved, seconded, and resolved unanimously,—That the foregoing resolution be confirmed, and the same are hereby confirmed accordingly.

Also.—That Cunningham Borthwick, Esq., Thomas Close, Esq., Walter Sharp, Esq., and William Dallas Starling, Esq., be the liquidators for the purpose of winding-up the affairs of the Company of Proprietors of the Royal Consolidated Copper Mines of San Fernando, Cuba (Limited), and distributing the property thereof.

Dated the 10th day of January, 1859. By order, JOSEPH BRAND, Sec.

THE VICTOR EMANUEL MINING COMPANY (LIMITED).—Capital £25,000, in 25,000 shares of £1 each: 5s. payable on application, and the remainder on allotment.

DIRECTORS.

CHARLES HENEAGE, Esq., 3, Cadogan-place, Belgrave-square.

CHARLES T. THOMPSON, Esq., 42, Sussex-gardens, Hyde-park.

THOMAS PRENDERGAST, Esq., 13, Brunswick-place, Brighton.

THOMAS STANTON, Esq., 11, Finsbury-square, Bayswater.

(With power to add to their number.)

BANKERS.—Messrs. Herries, Farquhar, and Co., 16, St. James's-street.

SOLICITOR.—W. W. Fisher, Esq., 3, King-street, Cheapside.

SECRETARY.—Lewis C. Hertslet, Esq.

OFFICES.—No. 2, DERBY-STREET, PARLIAMENT-STREET, S.W.

PROSPECTUS.

This company has been formed for working some very valuable copper and nickel mines, situated in the Val d'Osola, near the Lago Maggiore, in Piedmont.

The mines are held in perpetuity, under royal grants or concessions, with a royalty of 2 per cent, only on the raw ores. They comprise a surface of several miles, and are known by the name of Megliandona, La Grella, and Nibio. That on which it is intended for the present to concentrate the chief efforts is Megliandona.

This mine is most favourably placed, being worked by levels driven on a very powerful lode of yellow copper ore of high percentage, and containing also a large quantity of nickeliferous pyrites. The lode traverses a high mountain, over the whole extent of which it has been traced, and in many places opened upon by trial pits. The mines are situated close to the River Tore, which is navigable by barges, and flows into the Lago Maggiore, over which the ores are taken to Aosta, whence they can be forwarded by railway to Genoa, and thence shipped to Swansea. The total cost per ton of ore from the mine to England will not exceed £30., a carriage road constructed purposely from the mines to the Tore, and which is the property of the company, being nearly completed. The railway from Domos d'Ossola to Aosta will also pass very close to the mine.

From their position, steam machinery will never be required for these mines. In their vicinity are the rich nickel and copper mines of Varallo, worked by a private company; these have produced, and are producing, very large quantities of ores. The mines of Megliandona are in every way, geologically and mineralogically, situated like those of Varallo, while their much smaller elevation over the plain, their greater ascertained richness in copper ore, and the greater regularity of their lodes, make them in every way a more desirable investment.

Most of the labour employed, that of the natives, is very cheap. A sufficient number of experienced Cornish miners has been sent out, under the direction of E. Francfort, Esq., F.G.S., whose full and elaborate report on the whole property may be seen at the offices of the company.

The company have purchased the property, upon which large sums have been expended in obtaining royal concessions, erecting buildings, constructing roads, and in bringing the mines to their present valuable condition, for the sum of £16,545, the whole of which sum the vendors have agreed to take in shares of the company. In addition, there are liabilities outstanding to the amount of about £2000, which this company have undertaken to pay. To meet these, and to carry on the further necessary operations, it is proposed to issue the remaining 8455 shares. The greater part of these have already been applied for, and the sum thus raised will, it is confidently expected, be ample sufficient to bring the mines during this year into a condition to ship large quantities of ore, and to realise handsome profits to the shareholders.

The following are extracts from the last report from the mines:

Megliandona, Dec. 12, 1858.—The lode in Level No. 1 is 2½ ft. wide, worth at present 2 tons of rich yellow ore per min. The lode in the present end of Level No. 2 (main level) is 5 ft. wide, composed of spar, carbonate of lime, yellow ore, and nickeliferous pyrites, and is worth 2½ tons of good yellow ore per min, and looking very kindly for a great improvement. The rise behind the end of the same level is worth 1½ tons of yellow ore per min. The winze in the same level has gone through a bunch of ore, dipping towards the end of the level. This bunch has been but lately discovered by us. The lode is 4 ft. wide, and worth from 4 to 5 tons of yellow ore per min. There is no reason to doubt that this bunch is connected with that in level No. 1, as there is a lode standing in the back of the level over the winze, worth 1½ ton per min. In the bottom level, the cross-cut which will intersect the lode is being driven by the Cornish miners with all speed. We are at present doing nothing in the old workings on the south side of the ravine, where the lode is very large, containing a large quantity of nickeliferous pyrites. Italian boys and girls are engaged in preparing the ore for the crusher, which we intend to put up as soon as convenient. The rough state of the mountain has given us much work in making our floors, but we are happy to say they are in a fair way of being completed. The carriage road is nearly finished.

The following is an assay of the ore from the bunch in the winze in the main level:

Assay Office and Laboratory, Bunting's Alley, Bishopsgate-street Without, Sept. 2, 1858.—Sample No. 1 contains 20-40-10th per cent. of fine copper.

JOHN MITCHELL, F.C.S.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Victor Emanuel Mining Company (Limited).

Shares £1 each. Deposit on application, 5s. per share.

GENTLEMEN.—Having paid £1 to your bankers, I request that you will allot to me shares in the Victor Emanuel Mining Company (Limited); and I hereby agree to accept such shares or any less number that may be allotted to me, subject to the provisions of the Limited Liability Act of 1856.

Name
Profession or business
Address
Place of business, if any
Date

THE LITTLE DOWN AND EBBER ROCKS MINERAL AND MINING COMPANY (LIMITED).—Capital £50,000, in shares of £1 each.

Deposit per share, 2s. 6d. on application, and 2s. 6d. within one month from allotment.

DIRECTORS.

CHAIRMAN—JOHN GREGORY, Esq. (of the firm of Messrs. White and Co., Bankers), Haymarket.

JOHN WILLIAM WREY, Esq., 21, Albemarle-street, Piccadilly, and Wells, Somerset.

JOHN HAMILTON CLEMENT, Esq., C.E., F.C.S., 3, Gloucester-street, London.

CHARLES PAUL BERKELEY, Esq., 6, Lansdown-place, Brunswick-square.

EDWARD N. FOLEY, Esq., 3, Clifton-lane, Maida-hill.

BANKERS.

London—Messrs. Spooner, Attwells, and Co., Gracechurch-street, E.C.

Wells—Messrs. White and Co., Haymarket, S.W.

Bristol—Messrs. Miles, Miles, Savile, and Co. (the Bristol Bank).

London—Messrs. Brunton and Son, Bartholomew-lane, Bank of England, E.C.

Bristol—Benjamin Spry Stock, Esq., 3, Albion Chambers (Broker to the Bristol Bank).

SECRETARY, pro tem.—Mr. Edward Doyle.

REGISTERED OFFICE.—74, KING WILLIAM STREET, CITY, LONDON, E.C.

This company will have the exclusive right to a freehold estate of 325 acres, of the estimated value of £40,000. The situation on the Mendip Hills, between Wells, Somerset, and Bristol, commands every market. Ores of manganese, silver-lead, hematite, &c., of the richest quality, with variegated and fossil marbles of great beauty, exist in large deposits over a wide extent of the property.

The shallow depths of the minerals below the surface, and the broken nature of the ground, render adits for draining, and the expensive machinery of ordinary mining, quite unnecessary.

The ores have been already satisfactorily introduced in the Welsh and other markets, and from the scale upon which the explorations have been made, the prospect of highly remunerative returns is certain and immediate. The farm lands are let to substantial tenants, and the first outlay upon the mine will be productive.

The minerals may be seen at the Royal Geological Museum, Jermyn-street, London;

Details will be found in the reports and surveys contained in the prospectus, which, with the form of applications for shares, may be obtained from the solicitor, brokers, and at the offices of the company, where every information will be communicated.

London, Jan. 1, 1859.

OLD RAILS.—The DIRECTORS of the SOUTH-EASTERN RAILWAY COMPANY are OPEN to RECEIVE TENDERS for a QUANTITY of OLD RAILS, at Angerstein Wharf, on the Thames. Terms and conditions of sale may be had on application to the storekeeper. Tenders to be sent in addressed to the secretary, on or before the 26th Inst. 8. SMILES, Sec.

METAL TRADES.—WANTED, for London, ONE or TWO FIRST-CLASS AGENCIES on commission, or to take the MANAGEMENT of the LONDON BUSINESS for a PROVINCIAL FIRM. Highly respectable references and testimonials will be given. The advertiser has had large and long experience in the metal trades.—Address, with particulars, to "G." Mining Journal office, 26, Fleet-street, London, E.C.

CORNISH ORES.—The ADVERTISER is OPEN to PURCHASE ANY QUANTITY of SULPHUR ORE, IRON ORE, &c.—Applications, stating analysis, price, and quantity, addressed "F. P." care of Messrs. Kennedy and Watson, stationers, &c., 16, Brown-street, Manchester.

BLEND OR BLACK JACK FOR SALE.—NOW READY.—Great Retailack Mine, near Perranzabuloe, Cornwall, ONE HUNDRED TONS of the above, samples of which may be obtained on application to FOWNING, STEPHEN and CO., Kenwyn-street, Truro.—Dated January 5, 1859.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS.—16, OOZELL STREET NORTH, BIRMINGHAM. STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL. OXIDE OF COBALT. (WIRE, &c.) REFINED METALLIC BISMUTH. GERMAN SILVER—IN INGOTS, SHEET, NICKEL AND COBALT ORES PURCHASED.

TWENTY PER CENT. DIVIDEND SILVER LEAD MINE, CARDIGANSHIRE.—WANTED, a PARTNER with SIX HUNDRED POUNDS, the capital to be employed in putting down the required machinery, and further working the mine. The one now raised with four men will leave a computed profit of 20 per cent. on two months' workings. The mine is well opened, and a very strong rich lode in one of the most celebrated dividend-paying districts in Cardiganshire, on the same lodes, and adjoining one of the celebrated mines that has been making £29,000 per annum profit. There is ample land for working, with increasing prospects and continued rising profits. Further information will be given to principals on application to "A. B." Mining Journal office, 26, Fleet-street, London, E.C.

CLERK.—WANTED.—by a respectable young married man, a SITUATION as CLERK. He is quick and correct in calculations, well up in book-keeping by double entry, balance, partnership, and stock accounts, and thoroughly experienced in the iron and coal trades in all their branches. References of the highest responsibility, and security if required.—Address by letter only, "C. B." Mining Journal office, 26, Fleet-street, London, E.C.

WANTED, a GENTLEMAN who has a connection amongst railway companies and iron merchants, to act as AGENT for the SALE of IRON, &c., in LONDON. His whole time will be required to be devoted to the interest of the house he represents.—Address, "Box 161," Post-office, Newcastle-upon-Tyne.

WANTED, an ACTIVE PERSON to take the GENERAL SUPERINTENDENCE of a BLAST FURNACE and ROLLING MILLS. None need apply but those who can produce unexceptionable references.—Address, Mr. SAINSBURY, Fenny-well-road Colliery, Bristol.

WANTED, at an Ironworks, a GENTLEMAN well educated in metallurgical science, to UNDEUTAKE THE DUTIES of CHEMIST, &c. Address, "M. W." Mining Journal office, 26, Fleet-street, London, E.C.

TO BE DISPOSED OF, a LARGE INTEREST in a SILVER-LEAD MINE (LIMITED).—THE SECRETARYSHIP, also, MAY BE OBTAINED if required.—Apply to R. McDONALD, Esq., Walcot-buildings, Bath.

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H

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4000 Bedford United (copper), Tavistock	2 6 8 ..	7 ..	7 1/2 73/4 ..	10 8 6 ..	0 3 0	Dec.	1858
240 Boscan (tin), St. Just	20 10 0 ..	60 ..	23 0 ..	1 0 0	Nov.	1858	
200 Botallack (tin, copper), St. Just*	91 5 0 ..	205 ..	430 15 0 ..	2 10 0	0 2 0	Dec.	1858
1600 Carn Bras (copper, tin), Illogan	15 0 0 ..	69 ..	65 70 ..	245 10 0 ..	2 0 0	Dec.	1858
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867 Cwm Eruin (lead) Cardigansh	7 10 0 ..	14 ..	0 10 0 ..	0 10 0	Nov.	1858	
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2048 East Falmouth (copper), Gwennap	2 0 0 ..	34 ..	0 7 6 ..	0 2 6	Jan.	1858	
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560 Providence (tin), Uny Lelant [S.E.]	20 13 2 ..	67 ..	0 16 0 ..	0 3 0	July.	1858	
2500 Rhosydol and Bachenddu (lead)	11 5 0 ..	13 ..	0 1 10 0 ..	0 10 0	Aug.	1858	
15000 Ruarden Colliery Company, Limited	0 5 0 ..	3% ..	0 1 10 0 ..	0 10 0	Aug.	1858	
286 South Canadian (cop.), St. Cleer [S.E.]	2 10 0 ..	420 ..	544 0 0 ..	8 0 0	Nov.	1858	
256 South Garrawas	26 0 0 ..	75 ..	2 0 0 ..	2 0 0	Nov.	1858	
512 South Tolpu [cop.], Redruth	8 0 0 ..	80 ..	75 80 ..	19 0 ..	Dec.	1858	
496 South Wheal Frances, Illogan [S.E.]	18 18 9 ..	230 ..	315 5 0 ..	5 0 0	Jan.	1859	
476 St. Ives Consols (tin), St. Ives	16 0 0 ..	55 ..	60 70 ..	920 0 0 ..	2 10 0	Nov.	1858
6000 Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0 ..	34/4 ..	8 18 6 ..	5 0 0	Sept.	1858	
512 Wendron Consols (tin), Wendron	23 7 8 ..	42 ..	4 0 0 ..	1 0 0	Dec.	1858	
6000 West Bassett (copper), Illogan [S.E.]	19 10 0 ..	23 ..	15 3 0 ..	9 0 0	Nov.	1858	
256 West Canadon (cop.), Liskeard [S.E.]	20 0 0 ..	140 ..	287 5 0 ..	2 0 0	May.	1858	
4000 West Fowey Consols (tin and copper)	7 10 0 ..	6 ..	0 2 6 ..	0 2 6	Mar.	1858	
4000 West Wheal Seton (cop.), Camborne	38 10 0 ..	325 ..	330 335 ..	146 0 0 ..	7 0 0	Dec.	1858
240 Wheal Bal (tin), St. Just	15 0 0 ..	18 ..	3 0 0 ..	0 10 0	Nov.	1858	
512 Wheal Bassett (copper), Illogan [S.E.]	5 9 6 ..	220 ..	507 10 0 ..	6 0 0	Dec.	1858	
256 Wheal Buller (cop.), Redruth [S.E.]	5 0 0 ..	130 ..	898 0 0 ..	3 0 0	Jan.	1859	
128 Wheal Friendship (copper), Devon	50 0 0 ..	90 ..	2385 10 0 ..	19 0 ..	Feb.	1858	
448 Wh. Wh. Margaret (tin), Uny Lelant [S.E.]	19 15 0 ..	67/4 ..	66 ..	93 10 0 ..	3 0 0	Nov.	1858
1024 Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0 ..	49/4 ..	48 49 ..	40 17 6 ..	2 5 0	Dec.	1858
80 Wheal Owles, St. Just, Cornwall	70 0 0 ..	300 ..	225 13 0 ..	5 0 0	Aug.	1858	
1040 Wh. Trelewlyn (sil.-id.), Liskeard [S.E.]	4 10 0 ..	31 ..	34 10 0 ..	1 0 0	Oct.	1858	
5000 Wicklow (copper), Wicklow	5 0 0 ..	40 ..	31 15 6 ..	1 10 0	Jan.	1859	

MINES WITH DIVIDENDS IN ABEYANCE.

1624 Baileswidden (tin), St. Just	11 5 0 ..	5 ..	12 5 0 ..	0 5 0	Jan.	1854	
1200 Brightside & Foggart Grove, Derbysh	3 0 0 ..	3/4 ..	3 0 0 ..	3 0	April.	1858	
100 Bryntall Hall (lead), Flintshire	25 0 0 ..	50 ..	13 0 0 ..	5 0 0	July.	1856	
1000 Bryntilly, Llandudno, Montgomeryshire	8 5 0 ..	11 ..	11 10 1/2 10 1/2 ..	0 5 0 ..	5 0 0	July.	1856
390 Bulnick Consols (tin), Perran	2 2 6 ..	15 ..	0 10 0 ..	10 0 0	Mar.	1857	
6000 Bwlch (silver-lead), Cardigansh	3 6 6 ..	15 ..	0 2 6 ..	2 6 ..	Aug.	1856	
4096 Calstock Consols (copper)	5 0 0 ..	4/4 4/4 ..	0 2 6 ..	2 6 ..	Dec.	1856	
2048 Carnyorth (tin), St. Just	4 15 0 ..	2 ..	0 15 0 ..	0 3 0	June.	1866	
2000 Collacombe (copper), Lamerton	5 0 0 ..	13 ..	2 5 0 ..	8 0 0	Dec.	1857	
256 Conduffor (cop.), Camborne	20 0 0 ..	90 ..	85 0 0 ..	2 0 0	June.	1857	
280 Derwent Mines (sil.-id.), Durham	300 0 0 ..	150 ..	122 0 0 ..	10 0	June.	1857	
672 Ding Dong (tin), Gulval	35 5 0 ..	8/4 ..	16 7 6 ..	1 10 0	Mar.	1857	
12300 Drake Walls (tin, copper), Calstock	2 1 0 ..	— ..	0 13 6 0 ..	2 0 0	Sept.	1857	
1024 East Wheel Margate (tin, copper)	7 17 6 ..	24 ..	0 5 0 ..	5 0 0	Nov.	1854	
4490 Fowey Consols (copper), Tintwistle	4 0 0 ..	3/4 ..	41 4 3 ..	6 0 0	Feb.	1857	
448 General Mining Co. for Irei, (cop., id.)	4 0 0 ..	13/4 ..	1 0 8 0 ..	3 0 0	June.	1853	
2000 Goginan (silver-lead), Cardigansh	12 5 0 ..	24 ..	22 0 0 ..	5 0 0	Sept.	1856	
1024 Gonamessa (copper), St. Cleer	14 5 0 ..	9 ..	0 7 6 ..	7 6 ..	Dec.	1857	
2636 Gt. Wh. Vor (tin, cop.), Helston [S.E.]	18 17 6 ..	34 ..	0 5 0 ..	5 0 0	Oct.	1858	
119 Great West (tin), Germoe	100 0 0 ..	110 ..	221 10 0 ..	7 0 0	Feb.	1857	
6000 Hington Down Cons. (cop.), Calstock	15 0 0 ..	3 ..	2 16 0 ..	2 6 0	Nov.	1857	
2000 Hollyford (copper), near Tipperary	11 0 0 ..	8/4 ..	4 2 6 ..	0 5 0	Jan.	1857	
4096 Lazey Mining Company, Isle of Man	100 ..	1,000 ..	1420 0 0 ..	5 0 0	June.	1857	
20000 Llanrhian (cop.), Carmarthen	4 10 0 ..	39/4 ..	0 10 0 ..	10 0 0	Dec.	1856	
5000 Mabyn (lead), St. Just	19 10 0 ..	22 ..					